

NASA Export Control Operations Manual



Message from the NASA Administrator:

As the world's premier aerospace agency, with remarkable achievement and expertise in space launch vehicles, satellites, aircraft and other advanced technologies, NASA has a unique responsibility to safeguard the sensitive technologies that are crucial to our missions. Accordingly, the NASA Export Control Program is devoted to maximizing the benefits of our international efforts, while ensuring that we comply with all U.S. export control laws, policies and regulations.

This Operations Manual provides the implementing guidelines for NASA's Export Control Program. It provides processes and best practices for properly and consistently fulfilling our export control obligations. These processes have been designed with broad Agency participation so as not to unnecessarily hinder NASA's ability to execute its missions and daily business. These guidelines are developed to facilitate the valuable work that you do, while protecting the Nation's unique capabilities and sensitive technologies.

As NASA employees, we have been entrusted with access to impressive resources, talent, capabilities and technologies, all of which demand our careful stewardship. I encourage each member of the NASA community – whether you think you'll be involved in work that is affected by Export Control Regulations or not – to take the time to familiarize yourself with this manual and to adhere to the processes as they apply to you.

Charlie B.

NASA Advisory Implementing Instruction

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EXPORT CONTROL OPERATIONS MANUAL

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Note: This operations manual provides implementing instructions for NASA's export control policies and processes. All references to such requirements contained in NASA Policy Directives (NPDs), NASA Procedural Requirements (NPRs), NASA Advisory Implementing Instructions (NAIIs) or other guidance should be verified by reviewing the cited authority directly.

How to use this manual: This document includes embedded hyperlinks for additional information. It also includes checklists and flowcharts. Consider printing them out to use as job aides. For any revisions, corrections, or modifications of this document, contact the Office of International and Interagency Relation's at Headquarters.

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Manual" available at: http://nodis3.gsfc.nasa.gov/lib docs.cfm?range=2

CHANGE LOG

Change #	Date	Section Number	Description/Comments
1	8-18-2015	1.1. What is an export and what is export control?	Added definition for "export controls."
2	8-18-2015	1.1. What is an export and what is export control?	Revised definitions for U.S. person and foreign person. Added four supporting footnotes for additional clarification.
3	8-18-2015	1.1. What is an export and what is export control?	Revised guidance for U.S. persons representing a foreign entity.

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Acronyms

ACP Access Control Plan

AECA Arms Export Control Act

AES Automated Export System

APP Adjusted Peak Performance

ARC Ames Research Center

AFRC Armstrong Flight Research Center

BIS Bureau of Industry and Security

CCL Commerce Control List

CCATS Commodity Classification Automated Tracking System

CEA Center Export Administrator

CEC Center Export Counsel

CER Center Export Representative

CFR Code of Federal Regulations

CI Counterintelligence

CJ Commodity Jurisdiction

CPS Center Protective Services

CT Counterterrorism

CTP Composite Theoretical Performance

CUI Controlled Unclassified Information

DAA Document Availability Authorization

DCS Destination Control Statements

DDTC Directorate of Defense Trade Control

DEA Drug Enforcement Administration

DOC Department of Commerce

DOD Department of Defense

DOS Department of State

DOT Department of Treasury

DSS Defense Security Services

EAA Export Administration Act

EAR Export Administration Regulations

EC Export Control

ECA Export Control Auditor

ECCN Export Control Classification Number

ECILD Export Control and Interagency Liaison Division

ECP Export Control Program

ECR Export Control Representative

ECS Export Control Staff

ECSD Export Control System Database

EDAA Electronic Document Availability Authorization

EEI Electronic Export Information

EIN Employer Identification Number

ELISA Export License Status Advisory

FNAM Foreign National Access Management

FPPI Foreign Principal Party of Interest

FTR Foreign Trade Regulations

GAO Government Accountability Office

GC General Correspondence

GPS Global Positioning System

GRC Glenn Research Center

GSFC Goddard Space Flight Center

GSA General Services Administration

HEA Headquarters Export Administrator

HEC Headquarters Export Counsel

HQ Headquarters

HS Harmonized System

HTS Harmonized Tariff Schedule

IA International Agreement

IATA International Air Transportation Association

ICAM Identity, Credential, and Access Management

IdMAX Identity Management and Account Exchange

ISS International Space Station

IT Information Technology

ITAR International Traffic in Arms Regulations

ITN Internal Transaction Number

IVC International Visit Coordinator

JIP Joint Implementation Plan

JSC Johnson Space Center

KSC Kennedy Space Center

LaRC Langley Research Center

LRODS Launch and Return Orbital Data Sheets

MCTL Military Critical Technologies List

MOU Memorandum of Understanding

MSFC Marshall Space Flight Center

MTEC Missile Technology Expert Committee

MTCR Missile Technology Control Regime Annex

NAII NASA Advisory Implementing Instruction

NAPA National Academy of Public Administration

NARA National Archives and Records Administration

NASA National Aeronautics and Space Administration

NCHC National Criminal History Check

NF NASA Form

NID NASA Interim Directive

NLR No License Required

NPD NASA Policy Directive

NPR NASA Procedural Requirements

NRRS NASA Records Retention Schedule

OAC Original Acquisition Cost

OCIO Office of the Chief Information Officer

OIG Office of the Inspector General

OIIR Office of International and Interagency Relations

OMB Office of Management and Budget

OPS Office of Protective Services

OR Order of Review

PDO Property Disposal Officer

PII Personally Identifiable Information

POA Power of Attorney

RWA Return Without Action

SAA Space Act Agreement

SAAG Space Act Agreement Guide

SBU Sensitive But Unclassified

SCAC Standard Carrier Alpha Code

SME Significant Military Equipment

SSC Stennis Space Center

STA Strategic Trade Authorization

STELA System for Tracking Export License Applications

STI Scientific and Technical Information

STTCP Security Technology Transfer Control Plan

TAA Technical Assistance Agreement

TTCP Technology Transfer Control Plan

UAV Unmanned Aerial Vehicle

U.S. United States

USCBP United States Customs and Border Protection

USXPORTS United States Export System

USML United States Munitions List

VEU Validated End-user

VWP Visa Waiver Program

XTN External Transaction Number

CHAPTER 1: INTRODUCTION

The National Aeronautics and Space Administration (NASA) is on the leading edge of technological development and international cooperation in space, aeronautics, and a variety of scientific endeavors. As a result, the Agency has a unique responsibility to safeguard the sensitive technologies that are crucial for our national security and our missions.

Exporting is a "privilege" not a "right," and export privileges can be revoked, diminishing our ability to conduct important international activities effectively. The Agency's Export Control Program (ECP) provides requirements and processes to ensure that all NASA exports, including commodities, software, technical data, technology and/or providing a defense service are conducted in accordance with United States (U.S.) export control (EC) laws and regulations.

NASA is firmly committed to compliance with U.S. export control laws and regulations. This responsibility starts at the top of the Agency, from the Administrator, and flows down to Mission Directorates and Center executive leadership who set the tone for day-to-day adherence to Agency's export control policies and processes. Management is committed to providing resources and timely training to employees across all missions and Centers as described in this manual.

The instructions and guidelines described in this Operations Manual provide standard processes to implement the ECP across all NASA Centers. All NASA employees, and all NASA contractors, grant recipients, or parties to agreements, to the extent specified or referenced in the appropriate contracts, grants, or agreements, will adhere to the processes and guidelines per this manual.

Chapter one addresses the following fundamental questions:

- What is an export and what is export control? (1.1.)
- What are NASA's export control policies? (1.2.)
- When are items subject to export control? (1.3.)
- Who is responsible for export control? (1.4.)
- Where to find more information? (1.5.)

Chapters two and three address the question:

• How to export?

In particular, Chapter two provides standard processes for all NASA personnel who wish to make a specific export request on behalf of the Agency. Chapter 3 is intended for export control practitioners who are responsible for managing the ECP. The administration of NASA's export control policies require competence regarding U.S. export control regulations.

Chapter four describes NASA's tiered training program and requirement. The training program plan encompasses various training levels based on employees' roles and responsibilities across programs/projects and supporting functions.

Chapter five describes the risk-based approach to managing technologies that warrant additional protection or attention, from an export control perspective.

1.1. WHAT IS AN EXPORT AND WHAT IS EXPORT CONTROL?

An export is the transfer of *anything* to a <u>foreign person</u> or a foreign destination by any means, anywhere, anytime (<u>22 CFR</u> §120.17 and <u>15 CFR</u> §734.2(b)). An export can involve a commodity, software, technical data, technology, and/or providing a defense service. Export controls are restrictions applied by the U.S. Government to the transfer of certain goods, services, software, technical data, and technology to foreign entities. With the exception of publicly available information and select other items, all exports require an export authorization. An export authorization includes: a <u>license</u>, a license <u>exemption</u>, a license <u>exception</u>, or <u>No License</u> Required (NLR)¹.

Exports can take place in any of the following ways:

- Verbal discussions or presentations to groups that include foreign persons whether in or outside of the U.S.
- Transmission of information to a foreign person, or a U.S. representative of a foreign person, whether in the U.S. or abroad, by any means such as email, telephone, or discussions
- Traditional shipments of items through Center
 Transportation/Logistics offices to destinations outside the U.S.
- Foreign visitors to NASA facilities

3.3.6.2.

Placing information on a public website and releasing photos/videos

¹ If No License is Required (NLR), then NLR is the authorization to export. See <u>Section</u>

IMPORTANT: An export is the transfer of <u>anything</u> to a foreign person or a foreign destination by <u>any means</u>, <u>anywhere</u>, <u>anytime</u>.

IMPORTANT: An export can involve a commodity, software, technical data, technology and/or providing a defense service.

IMPORTANT: An export authorization includes a license, a license exemption, a license exception, or No License Required (NLR).

- Hand carrying items outside the U.S. (including even your laptop and cell phone)
- Placing information in the <u>public domain</u> via websites, social media, or other means without prior appropriate authorization

A U.S. person means a person who is a protected individual² or a lawful permanent resident³ (LPR); a U.S. person can also be a corporation, business or other entity that is incorporated to do business in the U.S., and includes all U.S. Governmental entities (Federal, state, or local). A protected individual means a citizen or national of the U.S.,⁴ its territories and possessions; it also includes natural persons⁵ who are lawfully admitted for permanent residence, refugee status, or political asylum. A lawful permanent resident means a natural person who has been lawfully accorded the privilege of residing permanently in the U.S. under U.S. immigration laws. "Green card" holders are also considered to be U.S. persons because the green card serves as proof that its holder, a lawful permanent resident, has been officially granted immigration benefits, which include permission to reside and take employment in the United States.

A foreign person is any natural person who is not a U.S. lawful permanent resident or a protected individual. A foreign person also includes any foreign corporation, business or other entity that is not incorporated to do business in the U.S., as well as international organizations, foreign governments, and any agency or subdivision of foreign governments (e.g., diplomatic missions in the U.S.) (See 22 CFR §120.15).

A U.S. person representing a foreign corporation, business association, partnership, trust, society, or any other foreign entity should sign a Non-Disclosure Agreement (NDA) prior to receiving a NASA commodity, software, technical data, technology, and/or defense service. In signing the NDA, the U.S. person acknowledges the receipt of export-controlled items and the

² See <u>8 U.S.C. §1324b(a)(3)</u> for full definition of protected individual.

³ See <u>8 U.S.C. §1101(a)(20)</u> for full definition of lawful permanent resident.

⁴ See <u>8 U.S.C. §1101(a)(22)</u> for full definition of a U.S. national.

⁵ A natural person is a human being as opposed to an organization or entity.

requirement to obtain the appropriate export authorization prior to transferring those items to a foreign person. NASA thereby obtains the assurance that the U.S. person acknowledges their

responsibilities under U.S. export control laws and regulations.

Per the ITAR (22 CFR §120.10), technical data is information that is required for the design, development, production, manufacture, assembly, operation, repair, testing, maintenance or modification of an export-controlled item and must be protected in accordance with export control regulations.

Per the EAR (15 CFR §772), technology is specific information necessary for the "development," "production," or "use" of a product. The information takes the form of "technical data" or "technical assistance."

IMPORTANT: DOS and DOC have respective definitions for various export control terms. Consult your Center export control staff while applying appropriate definitions.

IMPORTANT: Both the ITAR and the EAR include criminal and civil penalties for export control violations that can result in monetary penalties, imprisonment, or both (22 CFR §127.3 and 15 CFR §764.3).

Export laws and regulations control transfers of technical data/technology and goods to foreign entities. The <u>Arms Export Control Act (AECA)</u> of 1976 authorizes the President of the U.S. to control export and import of <u>defense articles</u> and <u>defense services</u>. The President delegates the statutory authority to determine regulatory requirements for these transactions to the Department of State (DOS), which in-turn has developed the International and Traffic in Arms Regulations (ITAR), <u>22 CFR §120-130</u>, to implement this authority.

The Export Administration Act (EAA) of 1979, as amended, authorizes the President to control U.S. exports for reasons of national security, foreign policy, and/or limited supply. The President delegates the statutory authority to determine regulatory requirements for these transactions to the Department of Commerce (DOC), which in-turn developed the Export Administration Regulations (EAR), 15 CFR §730-774, to implement this authority (See Figure 1).

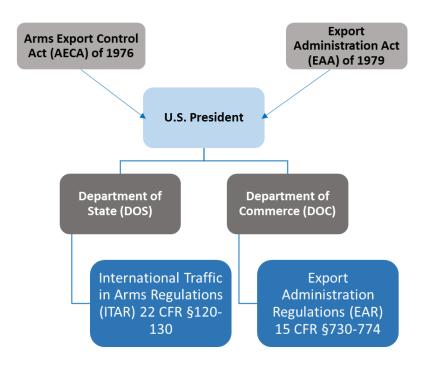


Figure 1: Export Control Regulatory Authority

1.1.2. International Traffic In Arms Regulations (ITAR)

The ITAR, administered by DOS, controls the exports of goods and technical data on the United States Munitions List (USML), including certain items on the Missile Technology Control Regime (MTCR) Annex. The USML includes 21 categories of enumerated defense articles and services that are subject to the ITAR and require a license or license exemption in order to be exported. The 21 categories are shown in Table 1 for reference. To see the full list in detail, refer to 22 CFR §121.1.

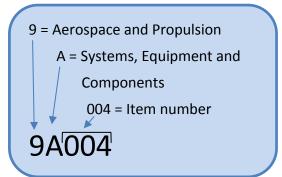
Table 1: ITAR United States Munitions List

I – Firearms, Close Assault Weapons, and Combat Shotguns	*XII – Fire Control, Range Finder, Optical and Guidance and Control Equipment
II – Guns and Armament	*XIII – Materials and Miscellaneous Articles
III – Ammunition/Ordnance	XIV – Toxicological Agents, Including Chemical Agents, Biological Agents, and Associated Equipment
*IV - Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines	*XV – Spacecraft and Related Articles
*V – Explosives and Energetic Materials, Propellants, Incendiary Agents and Their Constituents	XVI – Nuclear Weapons Related Articles
VI – Surface Vessels of War and Special Naval Equipment	XVII – Classified Articles, Technical Data, and Defense Services Not Otherwise Enumerated
VII – Ground Vehicles	XVIII – Directed Energy Weapons
*VIII – Aircraft and Related Articles	XIX - Gas Turbine Engines and Associated Equipment
IX* – Military Training Equipment and Training	XX – Submersible Vessels and Related Articles
X – Personal Protective Equipment	XXI – Articles, Technical Data, and Defense Services Not Otherwise Enumerated
XI* – Military Electronics	*Primary categories NASA handles.

1.1.3. EXPORT ADMINISTRATION REGULATIONS (EAR)

The EAR is administered by DOC and controls the goods and technologies on the Commerce Control List (CCL) (Supplement No. 1 to 15 CFR §774), including certain items on the MTCR. The DOC's Export Control Classification Number (ECCN) is key for determining whether an export license is needed (see Figure 2). The ECCN is an alpha-numeric code, e.g., 9A004, which describes the item and indicates reasons for control, licensing requirements (See Supplement No. 1 to 15 CFR §738 "The Country Chart"), and applicable license exceptions. The CCL, see Table 2, is divided into ten broad categories, and each category is further subdivided into five product groups. Table 2 lists these categories. To see the full list, visit the Bureau of Industry and Security's website (BIS).

Figure 2: Sample ECCN



9A004 is the ECCN for the International Space Station. Use Supplement 1 to 15 CFR §774 for the full list of ECCNs.

Table 2: EAR Commerce Control List

Commerce Control Category List		
0	Nuclear Materials, Facilities, And Equipment (and Miscellaneous Items)	
1	Materials, Chemicals, Microorganisms and Toxins	
2	Materials Processing	
3	*Electronics Design, Development, and Products	
4	*Computers	
5 Part 1	*Telecommunications	
5 Part 2	Information Security	
6	*Sensors and Lasers	
7	*Navigation and Avionics	
8	Marine	
9	*Aerospace and Propulsion	

Five Product Groups		
Α	Systems, Equipment and Components	
В	Test, Inspection and Production Equipment	
С	Material	
D	Software	
E	Technology	

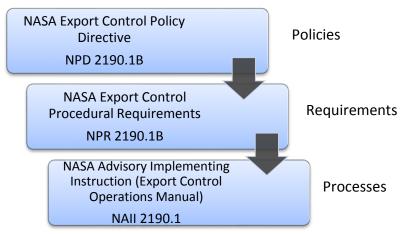
^{*}Primary categories NASA handles.

DOC also maintains lists of certain persons, including businesses, research institutions, government and private organizations, and individuals that are subject to specific license requirements for the export, re-export, and/or transfer (in-country) of specified items. Some of these persons comprise the Entity List (Supplement No. 4 to 15 CFR §744), established for reasons of proliferation concern, and are subject to licensing requirements and policies supplemental to those found elsewhere in the EAR. Others comprise the Denied Persons List, which are entities that have violated U.S. export control or other laws.

1.2. WHAT ARE NASA'S EXPORT CONTROL DOCUMENTS?

NASA is committed to compliance with all U.S. export control laws and regulations, which take precedence over NASA's policies and procedures. The Agency's export control policies and requirements are found in NASA Policy Directive NPD 2190.1B "NASA Export Control Program" and NASA Procedural Requirement NPR 2190.1B "NASA Export Control Program". This NASA Advisory Implementing Instruction (NAII) document further implements NASA's ECP. See Figure 3 for the Hierarchy of NASA's Export Control Program documents. In addition to Agency policies, procedures, and processes, NASA personnel are also expected to adhere to their Center-specific export control policies and procedures.

Figure 3: Hierarchy of NASA's Export Control Program Documents



1.3. WHEN ARE ITEMS SUBJECT TO EXPORT CONTROL?

The most significant steps in any export activity are to determine if the export is necessary, appropriate, and in accordance with NASA's export control policies. The first step in this process is to determine if the information and/or technology is already available to the public or considered to be fundamental research, as defined in 15 CFR §734.8, 22 CFR §120.11(a)(8), and described in NPR 2190.1B Appendix E. If it is in the public domain or considered to be fundamental research, it is not subject to export control.

If it is determined that the information and/or technology is subject to export control, there are three elements that the exporter needs to assess: a requirement to export, the nature/description of the item being exported (<u>commodities</u>, <u>software</u>, <u>technical data</u>,

<u>technology</u> or providing a <u>defense service</u>), and the appropriate export authorization .

The requirements for export are normally contained in the following types of officially written, signed, and approved documents:

- NASA Contracts and Grants: Such documents should require Technology Development and Technology Transfer Control Plans specifying export requirements (<u>NPR 7120.5E</u>, <u>Appendix</u> <u>G</u>, Sections 3.5 & 3.18).
- NASA Partnership Agreements such as domestic and international Space Act Agreements (SAAs), which include NASA's bilateral Memorandums of Understanding (MOU) and Joint Implementation Plans (JIPs)

Once the requirement for an export is determined, the exporter should continue the process by working with export control staff to obtain the appropriate export authorization, as discussed in Chapters 2 and 3.

IMPORTANT: There are three elements that the exporter needs to assess:

- 1. A requirement
- The item being exported (commodity, software, technical data, technology, and/or providing a defense service)
- 3. The appropriate export authorization

1.4. WHO IS RESPONSIBLE FOR EXPORT CONTROL?

Every NASA employee and contractor has the responsibility to comply with export control laws and regulations.

Figure 4 illustrates the Agency-wide delegation of authority to oversee all aspects of NASA's ECP. The NASA Administrator is responsible for the Agency's overall compliance with export control laws and regulations. Senior management across the Agency has the responsibility to enable compliance by providing adequate resources and timely training. Mission Directorates and Program and Projects Offices bear the primary responsibility to ensure their programs and projects are in compliance with these policies, and Center Directors are responsible for effective implementation of NASA's Export Control Program at their Centers.

The Office of International and Interagency Relations (OIIR) oversees all export controlrelated activities, under its Export Control and Interagency Liaison Division (ECILD). The essential ECP roles and responsibilities are described in NPR 2190.1B.

Primarily, export control compliance is administered by the Headquarters Export Administrator (HEA) and the community of Center Export Administrators (CEAs). Centers may also appoint Alternate/Assistant CEAs (ACEAs) to support the CEAs. In this document, the export administrators and their support staff are collectively referred to as Export Control Staff (ECS), unless specifically identified by title. The CEAs may further delegate part of the authority to Export Control Representatives (ECRs), also referred to as Center Export Representatives (CERs) at some Centers. ECRs⁶, if available, are the first point of contact to initiate an export request on behalf of a program/project or a functional organization.

The Headquarters Export Counsel (HEC) and Center Export Counsel (CEC) are responsible for providing legal guidance to the HEA and respective CEAs. They keep abreast of statutory and regulatory developments in the U.S. export control policies and laws, and assist the HEA and CEAs with reviews of exports and transfers, accordingly.

[12]

⁶ The acronym ECR also refers to CERs and is used throughout the rest of this document. ECR roles and responsibilities vary across the Centers.

The Program/Project offices are typically the "Requestor" of export actions. The Property Disposal Officer (PDO) and Transportation/Logistics typically assist in processing exports by physically transferring those items approved by CEA for transport. Other functional organizations, such as the Office of Chief Information Officer (OCIO) and Office of Protective Services (OPS), provide a supporting role in implementing the ECP across the Agency. For example, OCIO creates policies to control the release of technical data/technology and provides Information Technology (IT) systems that prevent its unauthorized release; and OPS verifies credentials of foreign persons and controls access to NASA property and facilities.

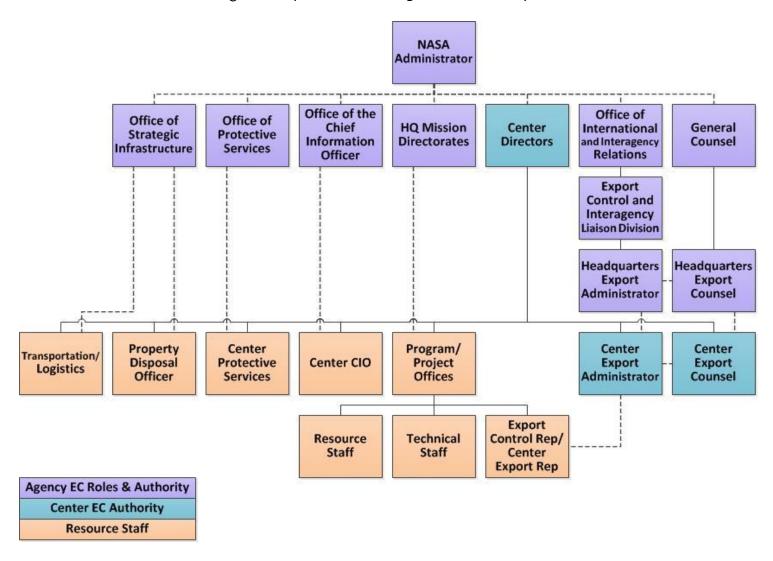


Figure 4: Export Control Delegation of Authority

1.5. WHERE TO FIND MORE INFORMATION?

The <u>ECILD website</u> is the primary resource for export control information. From here you can access <u>ECP's Inside NASA website</u>. From this site employees can download the checklists and flowcharts as described in this manual and ECS can access information from annual program reviews. In addition, Center export control websites provide Center-specific guidance, forms, and references. See <u>Table 3</u> and <u>Table 4</u>.

For further guidance, begin by contacting your Center ECS. If necessary, the CEA can contact the HEA or the Headquarters ECS for further assistance.

Table 3: Export Control Program Websites

Headquarters (HQ): External Inside NASA	http://oiir.hq.nasa.gov/index.html http://inside.nasa.gov/web/insidenasa/information_resources/export-control-interagency-and-liaison-division
Ames Research Center	http://jp.arc.nasa.gov/EC/EC.html
Armstrong Flight Research Center	http://xnet.nasa.gov/organizations/export_control/index.html
Glenn Research Center	https://export.grc.nasa.gov/
Goddard Space Flight Center	http://export.gsfc.nasa.gov/
Johnson Space Center	http://exportcontrol.jsc.nasa.gov/
Kennedy Space Center	http://exportcontrol.ksc.nasa.gov/
Langley Research Center	http://expcon.larc.nasa.gov/
Marshall Space Flight Center	https://explornet.msfc.nasa.gov/groups/export-compliance
Stennis Space Center	http://www6.ssc.nasa.gov/internal/export/
Department of State ITAR	https://www.pmddtc.state.gov/regulations_laws/itar.html
Bureau of Industry and Security, EAR	http://www.bis.doc.gov/index.php/regulations/export-administration-regulations-ear

Note: ARC and MSFC export control websites will only work behind their Center firewall.

Table 4 lists applicable NASA policy documents relevant to export control processes referenced throughout this manual.

Table 4: Applicable NASA Policy Documents

NPD 1360.2B, "Initiation and Development of International Cooperation in Space and Aeronautics Program"

NPD 1440.61, "NASA Records Management"

NPR 1441.1E, "NASA Records Retention Schedules (NRRS)"

NAII 1050.1C, "Authority to Enter into Space Act Agreements"

NPR 1450.10D, "NASA Correspondence Management and Communications Standards and Style"

NPR 1600.1A, "NASA Security Program Procedural Requirements"

NPD 1600.4, "National Security Programs"

NPR 1600.4, "Identity and Credential Management"

NID 1600.55, "Marking Recorded SBU Information"⁷

NPR 1620.2A, "Facility Security Assessments"

NPR 1620.3A, "Physical Security Requirements for NASA Facilities and Property"

NPR 1660.1B, "NASA Counterintelligence and Counterterrorism"

NPD 2190.1B, "NASA Export Control Program"

NPR 2190.1B, "NASA Export Control Program

NPD 2200.1C, "Management of NASA Scientific and Technical Information"

⁷ NASA Interim Directive (NID) 1600.55 is in effect until the OCIO's "Controlled Unclassified Information" (CUI) policy document is released.

NPR 2200.2C, "Requirements for Documentation, Approval, and Dissemination of NASA Scientific and Technical Information (STI)"

NPD 2540.1G, "Personal Use of Government Office Equipment Including Information Technology"

NPD 2810.1D, "NASA Information Security Policy"

NPR 2810.1A, "Security of Information Technology"

NPR 4200.1G, "NASA Equipment Management Procedural Requirements

NPD 4300.1B, "NASA Personal Property Disposal Policy"

NPR 4300.1C, "NASA Personal Property Disposal Procedures and Requirements"

NPR 7120.5E, "NASA Space Flight Program and Project Management Requirements"

NPR 8000.4A, "Agency Risk Management Procedural Requirements"

NPR 9700.1, "Travel"

CHAPTER 2: EXPORT CONTROL PROCESSES FOR ALL PERSONNEL

This chapter describes specific processes for various export control-related activities. The instructions are intended for all NASA employees and contractors, as appropriate, across the Agency who may potentially export on behalf of the Agency in furtherance of NASA's missions. The checklists referenced in this chapter do not replace existing Center-equivalent forms or systems.

2.1. EXPORT REQUEST PROCESSING TIMELINE

The amount of time that it takes to process an export depends on the type of export, the complexity of the export, and the current workload of the ECS. An export that is not subject to sanctions or restrictions requires less time to process than those with more complex requirements. Some of the factors that affect processing time are:

- Validation of export requirement
- Nature of the item to be exported
- End-user
- End use
- Export destination
- Method of transfer
- requirements.
- The accuracy and completeness of the supporting information sent to the ECS/CEA
- Associated technical background information to review
- The need to apply for a license (see <u>Section 3.3.</u>)
- Responsiveness of the technical organization to requests for clarifications, corrections and additional information
- Existence of other exports already being worked, and the number of other requests to expedite and prioritize matters that are already in the queue
- Critical nature of request (supporting key national or NASA objective)
- The availability of resources within the ECS to review and approve exports

In general, identify export requirements early and do not wait until an item is ready for export to begin processing the export documentation. Programs and projects should involve the Center ECS early with current and new projects to share what, when, to whom they intend to transfer and share NASA's commodities, software, technical data, technology, and/or provide

IMPORTANT: To minimize processing time, where appropriate, a program/project may seek blanket authorization(s) for certain processes.

defense services. To minimize processing time, where appropriate, a program/project may seek blanket authorization(s) for certain processes such as shipments, sharing STI, and hosting meetings as described in this manual. For any modifications in mission scope, foreign participants, or terms of existing requirement, a new export control review should be completed.

Processing time begins when an export request is received by Center ECS. Exports do not necessarily follow a set of predictable pattern of factors. For example, an export for which the classification is known may still require a license (necessitating longer processing time), while an export for which the export classification must be determined may, in the end, be processed in a shorter amount of time because no license is required. For planning purposes, below are general timelines for reviewing complete, current and accurate exports:

- Simple and Routine Exports nominally 1-5 working days: These are items for which the export classification is "obvious" or known; where no license is required; exported to non-proscribed users and locations, for usual and customary end-use.
- Moderately-Complex Exports nominally 5-7 working days: These are items for
 which the export classification is not known but can be determined with certainty;
 where no license is required or a license <u>exemption</u> (ITAR) or <u>exception</u> (EAR) exists;
 exported to non-proscribed users and locations, for usual and customary end-use.
- Complex Exports nominally 10-60 working days: These are items for which the
 export classification is not known because of uncertainty about purpose, use,
 history, or other factors (but can be determined); where a license exemption or
 exception may be used; and exported to non-proscribed users and locations, for
 usual and customary end-use. External reviews and approval typically range from 30
 to 60 days.
- Highly-Complex Exports nominally 40-80 working days: These are items for which the export classification is not known because of uncertainty about purpose, use, history or other factors. Examples of highly complex exports include: submitting a

<u>Commodity Jurisdiction</u> (CJ) request, exports involving missile technology, a proscribed destination, sent to a restricted end-user, or for non-customary or special end-use. External reviews and approval typically range from 30 to 60 days, but in some cases can take months or even years.

2.2. REVIEW AND MARKING OF DOCUMENTS

In the definitions section of NPR 2190.1B under "marking" is the requirement for specific marking on export-controlled information prior to dissemination. In addition, NPD 1440.61 section 5.o.(3) "NASA Records Management":

BEST PRACTICE: Mark all exportcontrolled documents upon creation with the appropriate statement, regardless if the document will be transferred to a foreign party or not.

- "(o) All NASA employees or organizations that create, maintain, and dispose of NASA-owned records shall:
- (3) Ensure records are marked with the proper access controls when they are created or issued, in accordance with NPR 2190.1, NASA Export Control Program."

2.2.1. EXPORT CLASSIFICATION REVIEW AND MARKINGS FOR ALL TECHNICAL DOCUMENTS

All scientific and technical information must be reviewed and marked by the document owner prior to sharing with a foreign person, ideally, upon creation.

2.2.1.1. CONTROL OF OLD OR EXISTING TECHNICAL INFORMATION

NASA has many technical documents from previous and on-going programs and projects that are archived in repositories, planned to be archived or are currently in use.

For documents that are archived or planned to be archived, NASA, DOC, DOS, and the National Archives and Records Administration (NARA) have entered into an inter-agency agreement that controls these documents. As part of this Agreement, NASA is not required to review every individual document prior to transfer to the Archives. NASA is allowed to identify groups of documents as "may contain export-controlled information," and NARA limits access to these documents to U.S. Persons only. This permissive approach should be employed judiciously, however.

Existing unmarked technical documents should be treated as if they do contain export-controlled information. The following markings should be placed on such documents or their container⁸:

Export Control Notice

This document or container may include information subject to export control. This document may not be provided to any foreign person until Center Export Control Staff reviews the document, determines the export classification, and attaches a correct export control label.

For documents to be shared with a foreign person (as described in <u>Section 1.1.</u>), they must follow the process in <u>Section 2.3</u>. The document should be marked by the document owner.

2.2.1.2. ITAR AND EAR MARKINGS

Document owners should mark <u>all</u> technical documentation with an affirmative statement advising the reader of the export jurisdiction and export classification. Most documents subject to export control under the ITAR and/or EAR are generally marked in one of two manners. The first and most common practice involves the marking of an entire document, such as an engineering drawing package, technical report, mishap investigation report, or technical presentation. In some engineering or scientific documents, the majority of the content may be export-controlled. While marking a whole document, place the ITAR and/or EAR notice on the cover page in a font size that is readable when printed. Ideally, insert the jurisdiction and category into the header or footer of the remaining pages, and the marking is complete. The appropriate markings for documentation controlled under the ITAR, EAR, or both are illustrated in Figure 5.

⁸ Container may include a box, file cabinet, room, burn bag, warehouse, etc.

Figure 5: Standard ITAR and EAR Markings

ITAR Category ____

- International Traffic in Arms Regulations (ITAR) Notice -

This document contains information which falls under the purview of the U.S. Munitions List (USML) as defined in the International Traffic in Arms Regulations (ITAR), 22 CFR §120-130, and is export-controlled. It shall not be transferred to foreign persons in the U.S. or abroad without specific approval of a knowledgeable NASA export control official, and/or unless an export license or license exemption is obtained/available from the Directorate of Defense Trade Controls, United States Department of State. Violations of these regulations are punishable by fine, imprisonment, or both.

EAR ECCN ___

- Export Administration Regulations (EAR) Notice -

This document contains information within the purview of the Export Administration Regulations (EAR), 15 CFR §730-774, and is export-controlled. It may not be transferred to foreign persons in the U.S. or abroad without specific approval of a knowledgeable export control official, and/or unless an export license or license exception is obtained/available from the Bureau of Industry and Security, United States Department of Commerce. Violations of these regulations are punishable by fine, imprisonment, or both.

Subject to U.S. Export Control Regulations:

This document contains information within the purview of the International Traffic in Arms Regulations (ITAR), 22 CFR §120-130 and the Export Administration Regulations (EAR), 15 CFR §730-774, and is export-controlled. It may not be transferred to foreign persons in the U.S. or abroad without specific approval of a knowledgeable export control official, and/or unless an export license, license exemption, or license exception is obtained/available from the Directorate of Defense Trade Controls, United States Department of State or Bureau of Industry and Security, United States Department of Commerce. Violations of these regulations are punishable by fine, imprisonment, or both.

For international missions, program/projects may create specific markings such as the following for the International Space Station (ISS):

Program/Project: International Space Station

This document, and technical data contained in it, are subject to United States export laws and regulations. They may be used only in the International Space Station (ISS) program to fulfill responsibilities of the Parties or of a Cooperating Agency of an ISS Partner in furtherance of the ISS Intergovernmental Agreement. Re-transfer or disclosure to, or use by, any persons other than citizens of ISS Program International Partner countries, or use for any other purpose, requires prior U.S. Government authorization.

The second practice, although more resource intensive, involves marking select pages within such documents. In certain situations, it may be desirable or necessary to be able to remove the export-controlled information quickly from the affected pages before the document is shared with someone who would not ordinarily have permission to view it. Place the ITAR or EAR notice on the cover page in a font that is readable when printed. Add a note to the cover indicating that only select pages contain export-controlled information. Place a note (in red) in the header or footer of the affected pages indicating the following: "This page contains information subject to U.S. export control regulations under the (insert ITAR and/or EAR)." On those pages, highlight the affected text/image in yellow for ease of recognition, and the marking is complete.

NOTE: NASA collaborates with other U.S. Government agencies that have specific documentation marking standards, as well. The lead agency or the agency of the lead author typically determines how the document is marked. When NASA is not the first author, NASA may defer to the lead agency's documentation marking requirements. The NASA author should work with the ECS to resolve any conflicts.

2.2.1.3. EXPORT CONTROL RECORDS THAT ARE ALSO SENSITIVE BUT UNCLASSIFIED (SBU)⁹

Export-related records and export-controlled documentation may also be Sensitive But Unclassified (SBU) and require an SBU marking. Recorded information in any form (physical or electronic) that is designated as SBU shall be marked by the originator or custodian so that

.

⁹ SBU may be replaced by "Controlled Unclassified Information" (CUI) in the future.

individuals with access to the SBU information are aware of its sensitivity and protection requirements. Reference (NID) 1600.55, section 5.24.3 "Marking Recorded SBU Information".

2.2.1.4. MARKING EMAIL

An email (without attachment) that contains text with export-controlled information can be a record and should be marked as such. The sender of the export-controlled information to a foreign party is responsible for including the appropriate marking. A way to mark the email is to include the words "CONTAINS EXPORT-CONTROLLED INFORMATION" at the end of the subject line and to include the ITAR and/or EAR notice (see Figure 5) in the body of the email.

2.2.2. Marking of Shipping Documents With Destination Control Statements

The ITAR and EAR have their own Destination Control Statements (DCSs) that must be written on a <u>bill of lading</u>, airway bill, invoice, and other export documents.

For shipments subject to the ITAR, mark with the published DCS shown in 22 CFR §123.9(b)(1):

ITAR Destination Control Statement (22 CFR §123.9(b)(1))

These commodities are authorized by the U.S. Government for export only to [country of ultimate destination] for use by [end-user] under [license or other approval number or exemption citation]. They may not be resold, diverted, transferred, or otherwise be disposed of, to any other country or to any person other than the authorized end-user or consignee(s), either in their original form or after being incorporated into other end-items, without first obtaining approval from the U.S. Department of State or use of an applicable exemption.

For shipments subject to the EAR, the DCS must be entered on the invoice and on the bill of lading, air waybill, or other export control document that accompanies the shipment from its point of origin in the U.S. to the <u>ultimate consignee</u> or end-user abroad. <u>15 CFR §758.6(b)</u> applies:

EAR Destination Control Statement (15 CFR §758.6(b))

These commodities, technology, and/or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

For shipments containing both EAR and ITAR items, both the EAR and ITAR DCSs must be used on the invoice and on the bill of lading, air waybill, or other export control documents. To distinguish which phrase applies to which commodity, the EAR DCS verbiage should be prefaced

by the phrase, "For items subject to the Export Administration Regulations," while the ITAR verbiage (22 §123.9(b)(1)) should be prefaced with, "For items subject to the International Traffic in Arms Regulations."

2.2.3. Marking Shipping Documents with Export Authorization and Classification

It is a best practice to include the export authorization and classification on all shipping documents. The ITAR USML Category and the license number or the license exemption reference for each item should be marked on all shipping documents. Similarly, the EAR ECCN, and license number or license exception reference for each item should be marked on all shipping documents. For Strategic Trade Authorization (STA) shipments, required statements also apply for each item (see 15 CFR §740.20).

2.3. PROCESS FOR SHARING TECHNICAL DATA OR TECHNOLOGY WITH A FOREIGN PERSON

Sharing <u>technical data</u> under the ITAR or <u>technology</u> under the EAR with foreign persons by any means is an export. This includes, but is not limited to, exports to foreign persons or foreign destinations via regular mail or email and/or sharing the data with on-site foreign persons. A Requestor is required to get CEA approval prior to exporting or sharing technical data or technology. <u>Figure 6</u> illustrates the review process. If there is a SAA, a corresponding export license or license exemption or exception in-place allowing for the sharing of export-controlled technical data/technology, then the CEA verifies that the export request meets the exact parameters in those documents. Upon CEA's approval, the Requestor is allowed to share technical data or technology per the terms and duration of the authorization.

The Requestor shall submit the key information, per <u>Checklist A</u>, about the intended export to initiate the export request with the Center ECS. The information may be submitted to the ECR or Center ECS for review and disposition using a Center-equivalent form or system.

The ECS review shall include checks of denied persons and entities lists for both the recipient of the data and the affiliated company/organization. The ECS classifies the data (if not already classified), and determines the export authority (including any export license requirements). Based on the export control review, the ECS may request additional supporting information, return the request for corrections, approve, or reject the request. If approved, the ECS documents any export instructions for the Requestor. If Automated Export System (AES) filing is required (see Section 3.4.), the ECS forwards the information to the AES filer for filing.

Checklist A: Export Control Request				
	Exporter's name			
	Exporter's organization/company			
	Exporter's phone number			
	Type of export (commodity, software, technical data, technology and/or providing a defense service)			
	What is the authority (contract or agreement) in place that requires this item to be exported? Provide a copy of authorization.			
	Provide a description and quantity of the item(s)			
	Name of ultimate destination			
	Address of ultimate destination			
	Method of export (shipping/receiving, hand carry, U.S. mail, fax, electronic, posting on the web or other)			
	Provide value and weight (if applicable)			
	Date of export			
	Is this a temporary export? If so, return date?			
	Is this a loan? If so, a NF-893 is required in accordance with NPR 4200.1G.			

ECS/CEA Requestor Start Prior export Verify that the export meets control authorization? authorization parameters No Complete Checklist A and Submit Export approved? to ECS Review Checklist A Complete background checks Determine license requirement See License Application Process (3.3.)AES filing required? No Yes Yes See AES Filing Process (3.4.) Document instructions for the exporter Approved? No Yes **Export per ECS instructions** End

Figure 6: Process for Sharing Technical Data or Technology with a Foreign Person

2.4. PROCESS FOR SHIPPING ITEMS TO FOREIGN PERSONS AND DESTINATIONS

All temporary or permanent exports of NASA-owned commodities, software, technical data, and/or technology, that are subject to export control shall be reviewed and approved by the ECS. In addition, if the export is to a designated country (see ECILD website), then it must also be approved by the HEA (see Section 2.8).

The Requestor should submit information per <u>Checklist A</u>, or a Center-equivalent form or system, for export control review. The ECS reviews the information, verifies that the export is necessary, completes background checks on both the recipient of the data and the affiliated company/organization, classifies the data (if not already classified), and determines any

licensing requirements. If a license is required, ECS works with ECILD to obtain the appropriate export license. If a license exemption/exception is available, approval to use the authorization requires HEA approval.

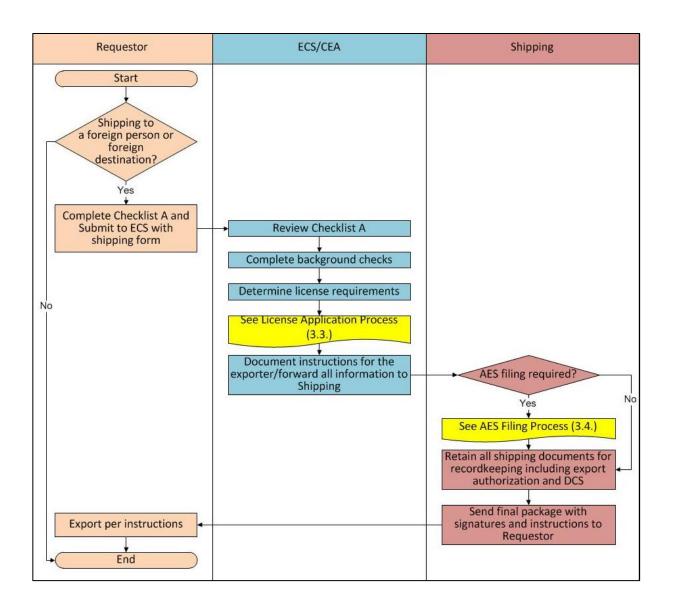
Based on the information provided, ECS may ask for additional information, approve or reject the shipment. Upon approval, ECS documents any export instructions for the Requestor and forwards the information to the Center

IMPORTANT: If a project foresees multiple shipments using the same license exemption/exception, blanket authorizations may be provided by the HEA to the CEA.

shipping organization. The final package includes documentation of ECS approval and export authorization, including any other required additional forms for recordkeeping as described in Section 3.5. The Center shipping organization is responsible for maintaining the official shipping records and must include the export authorization and appropriate DCSs. If AES filing is required (see Section 3.4.), include the documentation as part of the official record. Figure 7 illustrates this process.

If an export of NASA-owned commodities, software, technical data, and/or technology is handled by a third-party shipping and receiving office (such as a contractor or a university), then it is the responsibility of that party to ensure the shipping process is adhered to in accordance with the regulatory requirements, including correct and timely AES filing. However, NASA may request the review and copies of third-party shipping paperwork work including AES filing, prior to shipment.

Figure 7: Process for Shipping Exports to Foreign Persons and Destinations



2.5. PROCESS FOR FOREIGN DEPLOYMENT OF AIRCRAFT/BALLOON MISSIONS

Foreign deployments of aircraft and balloon missions undergo specific export control review and approval process. The Requestor shall submit all information on Checklist B or Center-equivalent form or system to Center ECS for any export in support of the deployment.

ECS reviews and classifies all items included in the deployment, and identifies the proper export authorization. Based on the export control review, the CEA either approves or rejects the request. If a license is required, the CEA informs the Requestor of the processing timelines and works with them on the license application. If approved, the CEA documents any export instructions for the Requestor.

If AES filing is required (see <u>Section 3.4.</u>), the ECS forwards the information to the AES filer for filing. Requestors must inform the ECS immediately if there are changes to the deployment in terms of dates, destinations or commodities being exported. <u>Figure 8</u> illustrates this process.

All personnel supporting the deployment should follow the foreign travel process in Section 2.9.

Checklist B: Export Control Request for Deployments		
□ Checklist A		
☐ Dates of deployment		
☐ Purpose of deployment		
☐ Destination(s)		
☐ Mode of transport for various commodities		
☐ Security measures being taken at each destination		
☐ Copies of diplomatic clearances		
\square Itemized list of all commodities being deployed		
☐ Shipping documents		
☐ Invoices		
☐ Any other supporting documents		

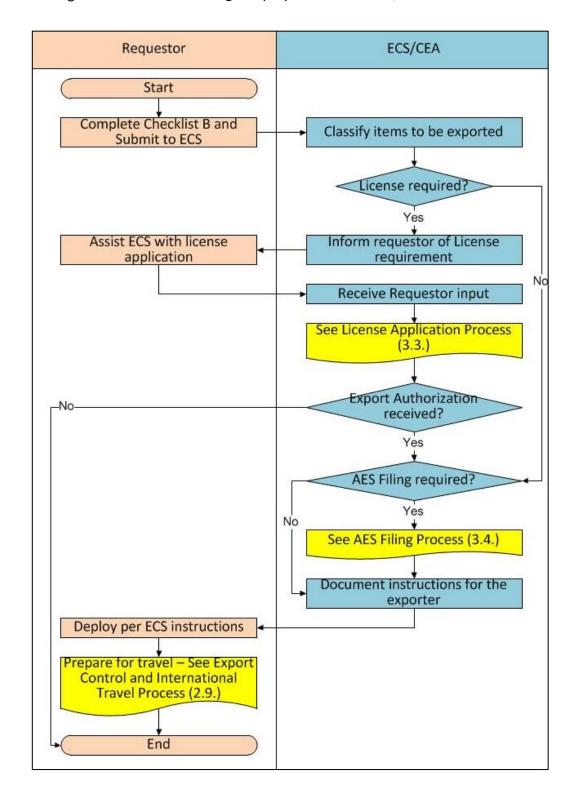


Figure 8: Process for Foreign Deployment of Aircraft/Balloon Missions

2.6. EXPORT CONTROL PROCESSES FOR FOREIGN NATIONAL ACCESS REQUESTS

The NASA Foreign National Access Management (FNAM) ¹⁰ program is administered by the OPS, OCIO, and OIIR. The program ensures that all security and export control requirements are met as NASA engages with foreign partners and visitors while preventing unauthorized access to NASA facilities and resources, including IT and technical data.

The Identity Management and Account Exchange (IdMAX) is NASA's web-based integrated system for Identity, Credential, and Access Management (ICAM). NASA uses IdMAX to manage NASA identities and credentials and to process requests for foreign nationals' visits to NASA facilities.¹¹

The Requestor gathers information for a foreign national visitor and enters it into IdMAX such as:

- Country of birth
- Country of citizenship
- Dual Citizenship (if applicable)
- Employer
- Affiliation
- Address information
- Visa type
- Passport information
- Purpose of visit and what access (data/facilities) requested
- Date, or period of time for visit
- If the visit is a high-level protocol visit

BEST PRACTICE: Uploading resumes and/or curriculum vitae into IdMAX provides additional background information on past affiliations of the foreign national.

¹⁰ The terms "foreign national" and "foreign person" are synonyms (See NPR 1600.4 Appendix A). "Foreign national" is used in this section because OPS primarily utilizes this terminology.

¹¹ For visits longer than 29 days involve a more stringent background investigation process. Long term visits are divided into two categories: temporary (30-180 days) and permanent (more than 180 days).

Once the request is entered, the Sponsor reviews and approves the visit request and the system routes it to the Center International Visit Coordinator (IVC) for their review and approval. If the necessary information and documents have been provided, the IVC forwards the request to the Center ECS for initial review.

2.6.1. CENTER EXPORT CONTROL STAFF REVIEW PROCESS

The Center ECS reviews the request for completeness, currency and accuracy, including country of birth and country of citizenship. While Center Protective Services (CPS) is responsible for validating the visa types, ECS should review that the visa type is consistent with the purpose of the visit and the type of access requested. For example, it is not appropriate to authorize a foreign national who has been granted U.S. entrance on a B1/B2 (business/pleasure) visa or under the Visa Waiver Program (VWP), as a "visiting researcher" to a NASA facility. Visiting researchers performing research for the benefit of the Agency are normally admitted on F, H, or J visas. A complete list of visa type and respective elements for review is included in Appendix B-1.

ECS executes a Visual Compliance¹² check on all foreign national visitors. Both nationality and citizenship are reviewed against the Designated Country List (see <u>ECILD website</u>) to determine whether non-public, export-controlled information may be provided in the course of the prospective foreign national visit via a license, exception, exemption, or provisos.

The Center ECS should review the purpose of the visit and determine if access to particular physical or logical¹³ areas are warranted. Once all of these factors have been reviewed and the appropriate actions have been taken, the Center ECS may request additional information using the IdMAX Review/Hold feature or they may approve or deny the visit request. When an Access Control Plan (ACP) (Section 2.6.6.) is required, it will be created to address all limitations and/or authorizations for the visitor based on requirements to access programs or information. ECS approves the request with a list of provisos in IdMAX (a complete list of provisos is

¹² Visual compliance, also referred to as 'name check', is an online screening tool that allows a single point check for an individual or entity (company, government entity, school, etc.) against all current export control restrictions, sanctions, law enforcement, international terrorist, blocked person, wanted and entity lists, and export risk country alerts.

¹³ Logical access refers to access a person has to NASA IT systems and information while inside the NASA firewall.

provided in <u>Appendix B-2</u> for reference), and the request is sent back to the IVC for final approval.

Once the visitor request is approved by the Center IVC, the Requestor is notified via an automated email sent through IdMAX, and the request is routed to the CPS Badging Office for enrollment and authorization (see <u>Section 2.6.4.</u>).

However, if an IdMAX request for a foreign national meets any one of the following conditions, it automatically routes the request to the Agency Desk Officer following the Center ECS review:

- The visitor is born in or is a citizen of a designated country (see ECILD website)
- A NASA-sponsored J-1 visa¹⁴ is involved
- The foreign national is a high-level protocol visitor (see in future FNAM manual)

2.6.2. AGENCY DESK OFFICER REVIEW

The Agency Desk Officer reviews access requests for foreign nationals born in or with citizenship of a designated country. The review is conducted based on their respective Mission Directorate programmatic requirements, any country-specific foreign policy issues/circumstances, and general compliance with Agency policies and agreements.

If there is questionable information, the Agency Desk Officer can request additional information from the Requestor. The Requestor is notified through an automated email sent through IdMAX if additional information is required. If the request is denied, the Agency Desk Officer must provide an explanation. If the Agency Desk Officer approves the request, then it moves forward to ECILD.

¹⁴ The J-1 visa indicates that the exchange visitor is NASA-sponsored.

¹⁵ There are specific Agency Desk Officers for each country.

2.6.3. ECILD REVIEW

ECILD reviews all previous entries and documentation, as well as an additional review in Visual Compliance to verify that the designated foreign national is not identified on the Denied Party, sanctions/embargos, or other lists.

During this review, the HEA reviews a list of conditions and provisos for the access request. If the HEA approves the request then the list of provisos is entered into IdMAX to be a part of the electronic file, and the request is sent to the IVC for final approval. IdMAX sends an automated notification to the Requestor after the IVC approves the request. If the request is not approved by ECILD or additional information is requested, IdMAX sends an automated notification to the originating Requestor with the explanation or request for additional information and provisos.

After ECILD approves the request, it routes back to the Center IVC for final approval. If approved by the IVC, the Requestor is notified via an automated email sent through IdMAX, and the request is routed to the CPS Badging Office for enrollment and authorization.

2.6.4. ENROLLMENT AND AUTHORIZATION

Once the access request is approved by export control and the IVC, the request is routed to CPS Badging Office for enrollment and authorization. Enrollment includes the capture of identity documents, fingerprint biometrics, and photograph. Once registration is complete, CPS conducts adjudication of the individual based on results of a National Criminal History Check (NCHC) and Visual Compliance database check, or additional checks, as appropriate. Successful adjudication will result in the authorization of the access request and issuance of an identity credential.

2.6.5. ISSUANCE

Once the visit is approved, a foreign national visitor badge is issued for on-site visits. If the visit is remote-only, appropriate credentials are issued for access. At the end of the visit, the credentials are returned to CPS and/or revoked. Escort requirements are to be consistent with NPR 1600.4, "National Security Program". Figure 9 illustrates the process for foreign national access requests.

2.6.6. Access Control Plan (ACP)

The ACP, formerly referred to as the Security Technology Transfer Control Plan (STTCP) or Technology Transfer Control Plan (TTCP), identifies the security and export control requirements necessary to obtain access to NASA resources (facilities, information, and technology). The capability to create and assign ACPs within IdMAX¹⁶ is currently being developed,¹⁷ and until that capability is made available, ACPs should be uploaded electronically to IdMAX and attached to an individual's identity record. ACPs are created for two distinct categories: programs and projects, and individuals.

An ACP must be created for each program or project (pACP) and should include any specific authorizations as necessary, such as licenses, exceptions, and exemptions. Program and project ACPs capture the information necessary to control access to the facilities, information, and technology relevant to that program or project. Program and project ACPs are "attached" to individual ACPs to define the requirements of the individual ACP.

An individual ACP (iACP) determines the requirements to which an individual foreign national must adhere in order to obtain access to a program or project, including escort requirements. The individual ACP captures pertinent background information regarding a specific foreign national's visit including physical access requirements and in-depth descriptions for any IT equipment and resources to be utilized. The individual ACP also includes foreign national briefings and the generation of Non-Disclosure Agreements, which ensure that the flow of information is being properly disseminated and that all Centers are aware of their accessibility. An individual ACP ensures ECS, program and project managers, security personnel, and others working with the foreign national have a consistent understanding of access allowances and methods to review and oversee access granted to the foreign national. Individual ACPs are required for all visits, regardless of duration, where access will be granted to programs or projects with security and export control requirements.

¹⁶ IdMAX is the only mechanism approved by the Office of Management and Budget (OMB) for the storage of identity records and associated date.

¹⁷ This feature is being developed to enhance electronic business processes that automatically limit access to systems and assets based on specific criteria.

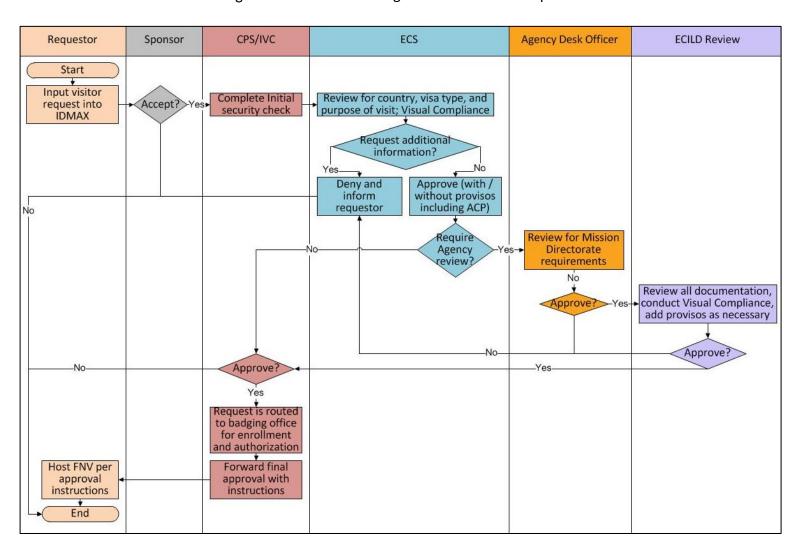


Figure 9: Process for Foreign National Access Requests

2.7. HOSTING MEETINGS WITH FOREIGN NATIONALS PRESENT

Hosting a scientific or technical meeting, whether remotely and/or on-site, requires extra awareness and planning to prevent the inadvertent transfer of export-controlled information and a potential export control violation. The organization, such as a program or project, responsible for hosting the meeting, must ensure that all export compliance protocols are followed prior, during, and at the conclusion of the meeting. The host may seek the assistance from ECS (ideally the program/project ECR) in planning and conducting the meeting.

In addition to onsite meetings, various types of remote meeting systems, such as Microsoft Lync, are available to users at NASA Centers. Additional care is needed to ensure that all remote attendees are known and authorized to receive information presented. A U.S. based-system, preferably a NASA system, should be used for international teleconferences. The Center OCIO can provide guidance on the security of these online collaboration tools. If there is any question that persons may be attending these online meetings who are not known or authorized to receive export-controlled technical data or technology, then the meeting discussions and presentation material should be limited to that which is in the public domain.

2.7.1. PRIOR TO THE MEETING

The following should be coordinated well in advanced of the meeting:

- For onsite foreign national participants verify that they are approved through the foreign national access request process per <u>Section 2.6.</u> before the day of the meeting.
- For remote foreign national participants without an International Agreement:
 - Obtain a list of all participants including their names, nationalities, affiliation.
 - Submit the list to ECS for Visual Compliance check.
- Ensure that the scope of the planned meeting is within the parameters of the export authorization(s) and communicate it to all participants. Contractors are responsible for ensuring their participation remains within the scope of their respective export authorization.
- Ensure that all planned presentation materials are reviewed per the STI process in <u>Section 2.12.</u> Contact your Center STI Manager for further guidance. Any walk-on

presentation materials not cleared for release via this process are not allowed for presentation/discussion during the meeting. All "handouts" containing technical data or technology should be tightly controlled by limiting the copies of printed material and relying on conducting presentations electronically.

- Ensure that all planned presentation materials are properly marked per Section 2.2.
- Generate an attendee roster for all foreign national participants. The roster should include, at minimum: name, nationality, and affiliation—all attendees must be accounted for, even if attending only briefly. The list of foreign national participants should be provided to the U.S. host before the scheduled meeting, so that they can evaluate the list against their export authorization(s).
- As a best practice, provide advance notification to foreign nationals when they are not authorized to attend a particular session or an entire meeting, to avoid the embarrassment of asking the individual(s) to leave an ongoing meeting.

2.7.2. CONDUCTING THE MEETING

While conducting the meeting, the host should ensure that:

- All participants sign the attendee roster or conduct a roll call. Verify that all attendees are authorized to attend. Consider adding "door monitors" whenever the meeting size is beyond the capability of the meeting host. The "door monitors" control

 IMPORTANT: The host should always be aware if foreign nationals are
 - physical access as well as telephone access.
- If needed, an ECS is asked to serve as the export control representative for the meeting to ensure that all export control protocols are followed.

IMPORTANT: The host should always be aware if foreign nationals are participating in the meeting. This includes being attentive to attendees who join the meeting after it begins.

- At the start of the meeting, remind the participants of presence of foreign nationals at the meeting and that all participants should remain within the scope of their respective export authorization(s).
- Maintain meeting records which include: attendee roster, date, time, location, presentation materials, and meeting minutes. The minutes should include a reference to the appropriate export authorization if export-controlled information is shared.

• At the conclusion of the meeting, collect all meeting materials (hard copy and electronic) and maintain meeting records.

<u>Checklist C</u> is provided to assist in planning and conducting a meeting as described above.

Checklist C: Hosting Meetings with Foreign Nationals				
Prior to meeting, the host should:				
	For on-site foreign national participants – verify that they are approved through the foreign national access request process.			
	For remote foreign national participants without an International Agreement:			
	 □ Obtain a list of all participants including their names, nationalities, affiliation. □ Submit the list to ECS for Visual Compliance check. 			
	Ensure that the scope of the meeting is within the parameters of the export authorization(s) and communicate it to all participants.			
	Ensure that all presentation materials are reviewed per the STI process and properly marked.			
	Generate an attendee roster to include, at minimum: name, nationality, and affiliation—all attendees must be accounted for, even if attending only briefly.			
At the start of the meeting:				
	Ensure all participants sign the attendee roster or conduct a roll call. Verify that all attendees are authorized to attend.			
	An ECS can serve as the export control representative for the meeting.			
	Remind the participants of presence of FNs at the meeting and that all participants should remain within the scope of their respective export authorization(s).			
During the meeting:				
	Maintain meeting minutes.			
	Be attentive to attendees who join after the meeting begins. They should be on the approved attendee roster.			
At the conclusion of the meeting:				
	Collect all meeting materials (hard copy and electronic).			
	Consolidate and maintain meeting records.			

2.8. CORRESPONDENCE WITH CITIZENS OF DESIGNATED COUNTRIES

This section pertains to correspondence with foreign persons of designated countries (see <u>ECILD website</u>) regardless of whether it contains export-controlled information or not. In accordance with NPR 1450.10D:

"Due to political sensitivities and concerns regarding potential technology transfer, NASA policy requires special handling of all official correspondence, including electronic messages, sent from NASA systems to designated areas. Requests from foreign entities for published information about NASA activities should be forwarded to the Headquarters' Office of Public Affairs for response. All other correspondence, including e-mails, to designated areas requires the concurrence of either the Center Export Administrator or the Headquarters' Office of External Relations [Office of International and Interagency Relations]."¹⁸

This requirement applies to all forms of correspondence except for "denial of a request for information" (See NPR 1450.10D E.1.e.). The correspondence may be in relation to program/project, coordination for a conference, and/or peer reviews of technical papers.

The Requestor should contact their CEA so they can be advised on the necessary information to prepare a request that goes to the HEA and to maintain the chain of authority from Center to CEA to HEA:

- Name and affiliation of the person receiving the information
- Description of the intended correspondence
- Timeframe for which it will occur

The CEA reviews the request and forwards it to the HEA if all necessary information is included. The HEA reviews and either denies or approves the correspondence The HEA will send an email back to the Requestor and CEA indicating the disposition of the request (i.e., needs corrections or more information, approve or deny). The HEA's response serves as the official record.

The HEA can authorize broader approval authority for specific projects, conferences, and/or activities for a finite period of time. It is up to the Requestor to explain and justify the

[43]

 $^{^{18}}$ Office of External Relations no longer exists, and OIIR performs this function.

need for broader authority and to describe the limitations on what will be provided. If the HEA rejects the request, the Requestor may modify their intended correspondence and seek approval again or refrain from participating in the correspondence. CEAs can be delegated the authority to approve correspondence requests, but this must be documented.

2.9. EXPORT CONTROL AND INTERNATIONAL TRAVEL

Export control requirements for NASA personnel while traveling overseas are outlined in NPR 9700.1 "Travel" Appendix A, §301-2.1 through §301-2.23. The primary goals for the export control review are to ensure that any NASA hardware, computers, cell phones, or other equipment taken abroad has the necessary export authorizations, that any presentations or technical data or technology accompanying the traveler has been reviewed and approved for public release or has the necessary export authorization(s), and that any country-specific foreign policy issues are identified and resolved.

2.9.1. HARDWARE ACCOMPANYING THE TRAVELER

The traveler should provide a list of all items, NASA-owned laptop, cell phone, or other government furnished equipment including items to be hand carried associated with the travel, to ECS at least 30 business days from the travel departure date to ensure adequate time for review and approval of items and interagency coordination as needed. Travelers are strongly advised to take loaner IT equipment, rather than the traveler's primary work station and work equipment that may contain information or software not directly required for the specific trip. Failure to confirm the necessary export authorization for hardware with Center ECS may result in a violation of the ITAR or EAR by the traveler.

In addition to the ECS review, the traveler must have a signed NF-892 (property pass) and the OCIO must also approve hardware being taken on international travel. Per NPD 2540.1G, "Under no circumstances should Agency laptops or personal computers be used for official business on International trips unless written authorization is first obtained from the Center CIO."

2.9.2. Presentation Materials

The review and approval of the release of technical papers and presentation materials is coordinated through the use of "NASA Form 1676 (NF-1676) NASA Scientific and Technical Information (STI) Document Availability Authorization (DAA)." The Electronic Document Availability Authorization (EDAA) may be used if available at your Center.

2.9.3. FOREIGN POLICY AND OR PERSONAL SECURITY

Consistent with NPR 9700.1, OIIR reviews all foreign travel to designated countries for consistency with Agency country-specific foreign policy objectives and for consistency with DOS-issued country-specific foreign policy objectives. OIIR can facilitate any required interagency notification or coordination that may exist for a specific country.

Per <u>NPR 1660.1B</u>, certain countries or destinations may have requirements for security briefings either before or after travel. The Center's Counterintelligence (CI) Office will coordinate and schedule these briefings. The purpose of the CI reviews is to ensure the protection of NASA personnel, information, and technology.

2.10. EXPORT CONTROL PROCESS FOR SPACE ACT AGREEMENTS (SAA)

NASA enters into SAAs with a wide range of entities, both domestic and international, to advance its mission. Agreements outline the conditions and restrictions for collaboration on a project with those parties. The Agency's process for writing and approving Agreements is set forth in NAII 1050.1C "Space Act Agreements Guide" (SAAG).

2.10.1. DOMESTIC AGREEMENTS

When a U.S. party to an SAA intends or plans to export or transfer items or data to foreign persons, they are responsible for complying with the export regulations. U.S. parties to SAAs may employ foreign persons, and this may be the primary means of the transfer of items or data to foreign persons. When exports occur under an SAA, the exporting party must ensure that export control conditions and restrictions are specified in the Agreement. The Center Designated Agreement Managers are the main points of contact with regards to developing and ensuring compliance with NAII 1050.1C.

2.10.2. International Agreements (IA)

It is important that Requestors of IAs coordinate with their Center ECS early in the process, because IAs commonly include transfers of commodities, software, technical data, technology, and defense services to foreign parties. OIIR is responsible for the negotiation, execution, amendment, and termination of all NASA IAs and serves as the Agreement Manager for all IAs. Although, a Center point of contact may be designated to execute many of the Agreement Manager tasks, as outlined in the Space Act Agreement Guide (NAII 1050.1C). Additional

guidance for IAs is also contained in NPD 1360.2B "Initiation and Development of International Cooperation in Space and Aeronautics Program."

As a matter of policy, NASA does not enter into or sign Technical Assistant Agreements (TAA) under the ITAR. Every contractor participating in a NASA international program is responsible for securing and remaining within the scope of their export authorization(s) per the terms of their contract.

2.11. EXPORT CONTROL PROCESS FOR PUBLICATION OF WEBSITE CONTENT

The Center OCIO in consultation with the CEA, ensures that IT policies, standards, and procedures are compliant with NPD 2810.1D, "NASA information Security Policy", NPR 2810.1A, "Security of Information Technology", and NPR 2190.1B.

A NASA employee or contractor must receive approval from the Center ECS prior to posting any NASA <u>technical data</u> or <u>technology</u> to a public website. The Center ECS reviews the material for export-controlled information and works with the Requestor to edit the content, as needed, to ensure compliance with export control regulations. The Center must document the approval per their Center-specific process.

2.12. EXPORT CONTROL PROCESS FOR NASA SCIENTIFIC AND TECHNICAL INFORMATION (STI)

STI is defined as "the results (the analyses of data and facts and resulting conclusions) of basic and applied scientific, technical, and related engineering research and development." All NASA STI and NASA-funded STI, proposed to be released by or on behalf of NASA (such as into the public domain, or presented at conferences, or meetings where foreign persons may be present), shall be reviewed in accordance with NPR 2200.2C and as described on the Agency's STI website.

The STI process includes an export control review and signature in section 8 of the NF-1676 or the export control block of the EDAA or CEA approval blocks of the Center systems that implement the DAA review. Requestors should allow sufficient time for ECS to process a determination request depending on the length and complexity of the material to be reviewed. Longer and complicated material may take up to 30 days or more to review. The Requestor should indicate what is already publicly available in the document that they want to be released in order to expedite the export control review process. NASA may not authorize the release of STI that contains information on equities controlled by other government agencies, such as the

Department of Defense (DOD), without their prior approval. The Center ECS must contact ECILD to obtain approval from other agencies.

2.13. EXPORT CONTROL PROCESS FOR PROPERTY DISPOSAL

Procedural guidance relating to the use and disposal of NASA-owned property is established in NPR 4300.1C "NASA Personal Property Disposal Procedural Requirements". It addresses the disposal management of NASA-owned excess, surplus, and obsolete exchange or sale property. The NPR applies to NASA Centers and the Government property held by NASA or contractors located on a NASA installation.

The Center Property Disposal Officer (PDO) is responsible for the disposition of excess, surplus property in compliance with U.S. Government property laws and regulations¹⁹. Property no longer needed by a NASA program or activity can be dispositioned in a variety of ways, including, but not limited to, such as, recycling, internal re-use, transfer, donation, sale by the General Services Administration (GSA), abandonment and/or destruction. Export control should take extra scrutiny to identify which items under no circumstances should be sold to the public.

Regardless of the disposition of the property, the NASA Property Disposal Office at each Center must contact the ECS to obtain the export classifications of the property to be disposed. The request may be for a single item or multiple items. The program/project requesting the disposal of the property provides the following property attributes to the PDO for correct classification of item(s) by ECS:

requesting disposal of excess property, the program/project should provide the necessary export classifications and recommended disposition of the property to the PDO (specifically if it can or cannot be sold to the public).

BEST PRACTICE: Prior to

- Name of the item
- Manufacturer
- Part number

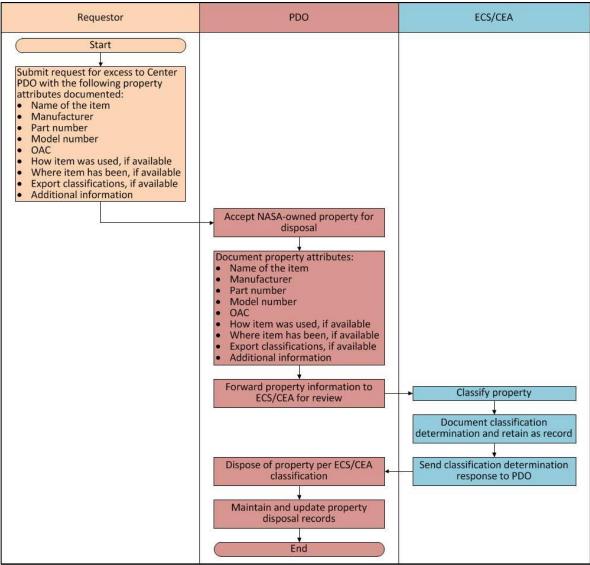
¹⁹ The PDO, consistent with <u>NPR 4300.1C</u>, only disposes ITAR-controlled property to vetted U.S. citizens for public sales.

- Model number
- Original Acquisition Cost (OAC)
- How item was used, if available
- Where item has been, if available
- Export classifications, if available
- Additional information

CEA review and instructions for disposition to PDO should be maintained by the ECS as the export control record. The original property disposal records are maintained by the Property Disposal Office. For individuals accessing NASA facilities to receive dispositioned property, refer to NPR 1600.1A.

See Figure 10: Process for Property Disposal.

Figure 10: Process for Property Disposal Sales



2.14. STATE DEPARTMENT LICENSES IN THE INTERAGENCY REVIEW PROCESS

NASA participates in the DOS interagency license approval review process. The Directorate of Defense Trade Control (DDTC), under DOS, seeks NASA's review and comments as part of its review process when it receives a space-related license application from industry or another government entity. NASA reviews the license request (including its terms and conditions) to determine whether it meets or supports the Agency's mission objectives and policies.

ECILD periodically requests that NASA Mission Directorates, Program Executives, and other offices evaluate license applications. At the Center level, the CEA coordinates the reviews with the responsible program/project or other Center offices. All reviewers evaluate the license applications from an Agency perspective and respond accordingly within five to seven days.

Examples:

- If a DSP-5 or TAA application request for export authorization does not fully address
 the commodity, software, technical data, technology, and/or defense services,
 locations, parties, or timelines that are stipulated by NASA contracts/International
 Agreements, NASA can provide inputs to DOS, including provisos, to meet NASA's
 requirements.
- If a company requests a DSP-5 or TAA to use NASA technical data rather than its own proprietary technical data as a defense service to satisfy a foreign client's technical solution needs, NASA may recommend that the license application be approved with certain provisos or be denied.

CHAPTER 3: EXPORT CONTROL PROCESSES FOR NASA EXPORT CONTROL STAFF

The administration of the NASA ECP is conducted in partnership between Agency and Center ECS. The processes described in this chapter are intended for the ECS who manage the day-to-day operations both at HQ and across all Centers. Many of NASA's missions are managed across multiple Centers. The HEA has the final decision-making authority in the event there are multiple interpretations of any of the ECP processes described in this manual or if there are disagreements across Centers regarding export control matters. NASA uses the processes described in this chapter to ensure compliance with export control regulations and NASA's internal policies.

Chapter 3 is intended for ECS staff who are practitioners in export control. The administration of NASA export control policies as defined in this chapter require competence regarding U.S. Export Control regulations.

Under Export Control Reform, many items that were previously under ITAR jurisdiction are being transferred under EAR jurisdiction. ECS must ensure the latest version of the regulations is being used to make the export control assessment.

IMPORTANT: ECS must ensure the latest version of the regulations is being used to make the export control assessment.

3.1. EXPORT CONTROL SYSTEM DATABASE (ECSD)²⁰

In order to manage the day-to-day operations of the ECP, ECILD utilizes and maintains an internal export control database to track all major export and import actions and decisions taken at the Agency level. The system allows the Agency to manage the ECP consistently and efficiently. The database tracks many ECP activities including: submissions to other U.S. Government departments and agencies, license exemptions and exceptions approved by the HEA, export cases staffed to NASA for review by export control agencies, ECILD export control decisions regarding release of NASA STI and other documents, all decisions on foreign national visits made by the HEA, and export control approval decisions regarding foreign travel made by NASA HQ employees. The Centers provide input into the ECSD with respect to actions taken to

²⁰ Centers do not yet have access to this system outside of Headquarters

review various export control documents, such as STI, licenses, exemptions, exceptions, and voluntary disclosures.

3.2. REVIEWING STI FOR EXPORT-CONTROLLED MATERIAL

As described in <u>Section 2.12.</u>, all NASA STI and NASA-funded STI requires an export control review prior to release. ECS may use <u>Checklist D</u> to facilitate the export control review of the information or their Center-equivalent review process. As noted in the checklist, not all STI requests contain export-controlled information. If ECS determines that the information is subject to the ITAR or the EAR, ECS may deny the request. If the ECS is uncertain, they must consult the CEA.

The CEA may authorize the publication or release of that information consistent with 22 CFR §125.4(b)(13) or 15 CFR §734.3(b). A request to publically release STI that is controlled for export compliance should include a justification to decontrol that material. It is recommended that the rationale be attached to the DAA. An example of documenting rationale is included in Appendix B-3 as a best practice. If the CEA is unsure about the assessment, the issue may be elevated to ECILD for further review.

Checklist D: Guidance for Export Control Review for STI Release				
Is the information in a <u>publicly available</u> document that was appropriately released such as NASA directives, NASA technical engineering, or safety standards?	□Yes	□ No		
Is the information high-level program schedules, budget information, or organizational information?	☐ Yes	□ No		
Is the information presently in the public domain? ²¹	☐ Yes	□ No		
Is the information considered general scientific, mathematical, or engineering principles commonly taught in schools, colleges, and universities?	☐ Yes	□ No		
Is the information considered basic marketing information on function or purpose or general system descriptions?	☐ Yes	□ No		
If you answered "Yes" to any of the above questions, the information does not include export- controlled content. If you answered "No" to all questions, proceed filling out this Checklist.				
Will the information be released to a limited audience via a NASA International Agreement?	☐ Yes	□ No		
Does the information you're reviewing have dissemination restrictions (i.e. For NASA Internal Use Only)?	☐ Yes	□ No		
Does the information concern a "defense article" on the USML or on the MTCR Annex? (See Appendix B-4 for defense articles frequently handled by NASA.)	☐ Yes	□ No		
If "Yes", does the document contain <u>technical data</u> related to the defense article?	☐ Yes	□ No		
Does the information concern an item on the CCL? (See <u>Table 2</u> .) If "Yes" does the document contain technology related to	☐ Yes	□ No		
the commodity?				
If you answered "Yes" to any of the above questions, export-controlled information is present in the material and cannot be fully released.				

 $^{^{21}}$ Best practice: ECS may document where that information is published or list the previously approved DAA Number.

3.3. PROCESS FOR LICENSE APPLICATIONS

The intent of this section is to provide specific guidelines for Centers to determine if a license is required for an export and the process to prepare the license application package.

3.3.1. DETERMINE IF ITEM IS SUBJECT TO EXPORT CONTROL

The first step in the license application process is to understand the nature of the commodities, software, technical data, technology, and/or provided defense service. In addition, the ECS must understand the context in which the transfer is going to occur, the contractual or agreement documentation, the program/project, who are the players involved in the transfer, who is the end-user, what is the end-use, where is the transfer destination, and in what manner is the transfer going to occur.

ECS then needs to ascertain whether the item is subject to export control (i.e., fundamental research or in the public domain). If the item is software, technical data, and/or technology, it could be considered to be fundamental research if it meets the qualifications described in 22 CFR §120.10, 22 CFR §120.11, 15 CFR §734.3, and 15 CFR 734.8. If the item is considered to be fundamental research, then it is not subject to export control.

If the item is software, technical data, and/or technology appropriately placed in the public domain, it is not subject to export control (22 CFR §120.10, 22 CFR §120.11, 15 CFR §734.3, and 15 CFR §734.8).

Just because an item is not subject to export control, there may still be NASA policy restrictions affecting potential receiving entities (see <u>Section 2.8.</u>).

3.3.2. JURISDICTION SELF DETERMINATION

Jurisdiction determination identifies whether the export item is subject to the ITAR or EAR. NASA officials who are authorized to make jurisdiction determinations include ECS (with CEA concurrence) and NASA Empowered Officials for export control. These individuals can seek advice from manufacturers, engineers, and other subject matter experts to assist in this process. Although NASA makes the Agency-level jurisdictional self-determinations, DOS has the final regulatory authority.

In order to make such determinations, detailed technical information must be gathered about the item, its function, information concerning the development of the item, and current foreign users. Review the ITAR first. DOS has an online tool (the USML Order of Review Tool) that is useful in making jurisdiction determinations and provides a mechanism

BEST PRACTICE: Use of DOS online tools provides a convenience means to document the determination process. Keeping records of Center determinations aid in future jurisdiction determinations.

to document how the determination is reached. This process is termed The Order of Review (OR). If the item is enumerated on the USML, then it is subject to the ITAR. The results from the DOS online tool cannot be substituted for consultation with the CEA, HEA or a DOS CJ. There are also online tools to help determine if an item is considered to be "specially designed" under the ITAR or "specially designed" under the EAR (DOS Specially Designed Tool and DOC Specially Designed Tool).

If the jurisdiction is self-evident, classify the item on the USML or the CCL (see Sections 3.3.5. and 3.3.6.). If a CEA is unsure of a jurisdiction self-determination or if a program spans multiple Centers, they should consult with the HEA, who may submit a CJ request to DOS.

3.3.3. DOS COMMODITY JURISDICTION (CJ) REQUEST

To request a CJ determination, the requesting project or program office shall complete

Blocks 4-18 of the <u>Department of State Commodity</u> <u>Jurisdiction Request, Form DS-4076</u> with assistance from Center ECS. Use <u>Checklist E</u> while filling out the DS-4076. If the item that is to be exported is software, then complete <u>Checklist F</u> and provide as an attachment to the CJ Request. This request can only be submitted to the DOS by a NASA Empowered Official.

IMPORTANT: Remember that while the CJ is under review by DOS, the item must be considered as subject to the ITAR until officially determined otherwise.

The program/project should allow at least two weeks for the CEA and HEA to finalize and submit a CJ request to DDTC. Upon receipt of a written CJ request from NASA, DDTC, in consultation with the DOD and DOC and other concerned U.S. Government agencies, typically responds within 60 days.

Once DDTC provides a determination in writing, the letter states the jurisdiction of control: ITAR (USML), EAR (CCL), or other. If the jurisdiction is ITAR, the category of classification within the USML is provided. If the jurisdiction is EAR or other, the specific classification may or may not be provided.

3.3.4. CLASSIFICATION

Once the jurisdiction is determined, the item needs to be classified on either of the two control lists (USML or CCL). Use the <u>DOS Order of the Review</u> and <u>Specially Designed</u> tools to help identify the appropriate USML Category (<u>22 CFR §121.1</u>). Use the DOC <u>Export Control Classification Interactive Tool</u> and the <u>Specially Designed Tool</u> to help identify the appropriate ECCN (<u>15 CFR §774</u> (CCL)). If there is doubt about the classification, even after utilizing the online tools, coordinate with the CEA or HEA.

3.3.5. DOC COMMODITY CLASSIFICATION DETERMINATION

In consultation with the CEA and HEA, the ECS may prepare a formal submission to DOC to classify an item if NASA is unable to determine the correct ECCN classification. The commodity classification request is submitted to BIS at DOC, in accordance with <u>15 CFR §748.3</u>. All NASA classification requests must be submitted to BIS by ECILD.

3.3.6. LICENSE REQUIREMENTS DETERMINATION

If an item is classified on the USML or the CCL, an authorization is required to conduct the export. An authorization may be either a license, a license exemption (for ITAR controlled items), or a license exception (for EAR controlled items), or No License Required (NLR).

The CEA must request approval to use an exemption or an exception from the HEA. For

ongoing and established missions, blanket authorization may be obtained at the start of the program or project per the terms of the program plan, contracts, and/or agreements. For any modifications in mission scope, foreign participants, or terms of existing requirement, a new export control review should be

IMPORTANT: If a project foresees multiple shipments using the same license exemption/exception, blanket authorizations may be provided by the HEA to the CEA.

completed prior to holding additional meetings to exchange scientific or technical data. Note: An International Agreement can provide the basis for several license exemptions under the ITAR.

3.3.6.1. ITAR LICENSE REQUIREMENTS

Once an item is determined to be subject to the ITAR, a license is required unless you can find an applicable license exemption. Exemptions frequently used by NASA are identified in <u>Appendix B-5</u>. If none of the exemptions are available, then ECS would prepare the license application package to submit to ECILD (see <u>Section 3.3.7.1.</u>).

3.3.6.2. EAR LICENSE REQUIREMENTS

Once an item is determined to be subject to EAR, a license may or may not be required. Use information contained in the "License Requirements" section of the ECCN in combination with the <u>Country Chart</u> to decide whether a license is required. Follow the instructions in <u>15 CFR §738.4</u> and use the decision tree as depicted in <u>Figure 11</u>: EAR Classification Process (<u>Supplement 1 to Part 732</u>) to aid in the determination of whether a license is required. If No License is Required (NLR), then NLR is the authorization to export and must be included on the shipping documents along with the ECCN.

If a license is required, then ECS should see if there is a license exception available. Exceptions that are frequently used by NASA are identified in <u>Appendix B-5</u>. ECS needs to carefully examine the license exception to ensure that the export meets all of the requirements specified in the license exception, including recordkeeping and reporting.

In addition, ECS must review the exception in light of the "Ten General Prohibitions" (15 CFR §736.2(b)), as stipulated in 15 CFR §740.2. If the export is subject to General Prohibitions four, seven, nine, or ten, then no license exceptions are authorized. If a license exception is not available to overcome each license requirement reflected in an ECCN and its use is not precluded by a General Prohibition, then a license application is required (see Section 3.3.7.2.).

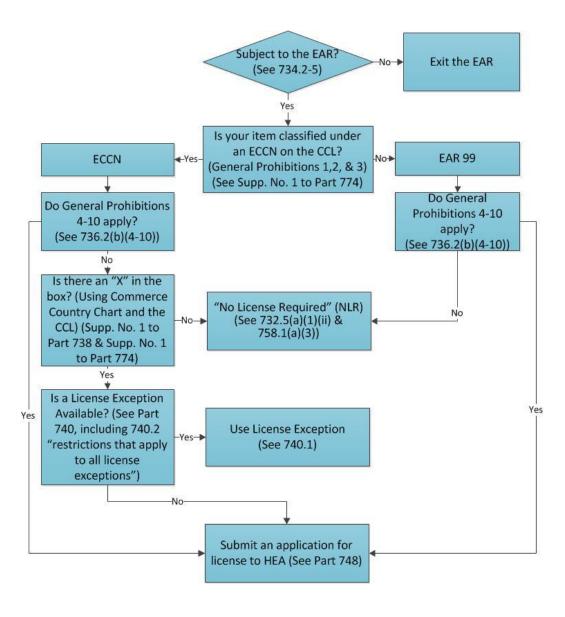


Figure 11: EAR Classification Process

3.3.7. APPLICATION PACKAGE TO SUBMIT FOR A LICENSE

Once it has been determined that a license is required for the export, the CEA prepares a license application package for ECILD review and approval. All license applications are submitted by ECILD to the appropriate regulatory authority. The intent of the application package is to provide the licensing officer and other reviewers as much information and clarity about the export as possible. The package narrative should be developed with specific

language so that a non-technical reader understands precisely what is being transferred, to whom, and why. To facilitate clarity and ease of understanding, adhere to these instructions to prepare the license:

- DO NOT use acronyms that have not previously been spelled out.
- Keep terminology in the letters of explanation and descriptions consistent.
- Avoid jargon and unnecessary technical terms.
- Explain new terms when they are introduced.
- All explanations should be self-contained;
 do not use language that may raise additional questions from the reviewers.
- Include precedent licenses, if applicable.
- Include an electronic copy of the International Agreement, if applicable.
- Structure the application so it can be decremented by U.S. Customs easily.

The CEA collects the required information, provides a draft cover letter, and gathers additional documentation to submit to ECILD. The package is reviewed and edited by ECILD and, if necessary, is returned to the CEA for coordination of any changes with the Requestor prior to final submission. Once the review is complete and both the CEA and HEA approve the license application package, it is submitted to DOS or DOC. Typically, it takes 60 days for DOS DDTC or DOC BIS to respond to a license application request.

Note: If the scope, entities or technology involve change after the license application is submitted, contact the HEA immediately. The license may need to be revoked or amended

BEST PRACTICE: For certain items like Unmanned Aerial Vehicles (UAVs) and sounding rockets, it is strongly advised to give a detailed briefing on the license package to the Missile Technology Export Committee (MTEC) team (comprising DOS, DOD, DOC representatives). The briefing should be conducted during the project formulation phase to gain MTEC's confidence that NASA has a robust plan to mitigate risks against compromising such technologies.

after it is approved. For example, if the freight-forwarding service is changed to a different company, the license may be amended after it is approved. As another example, if ten items need to be exported instead of six, the license may need to be returned to NASA to submit a new license application.

Once NASA has received a response from the regulatory agency, one of the following two actions take place:

- If the license is approved, a transmittal letter is signed by a NASA Empowered
 Official and forwarded to the responsible CEA. The transmittal letter provides
 instructions on the provisions, conditions or limitations, and reporting and
 recordkeeping regarding the use of the license. The CEA provides this letter, with
 the license, to the parties that are authorized to conduct the transaction.
- If the license is disapproved or Returned Without Action (RWA), based on the
 rationale that DOS DDTC or DOC BIS provides, ECILD coordinates with the ECS and
 Program Office to resubmit a revised license package or pursue an alternative course
 of action to support the NASA mission requirement.

The following sections provide instructions for the draft submissions.

3.3.7.1. ITAR LICENSE APPLICATIONS

The ITAR license application submission package consists of the following items. Use Checklist G to ensure that all information is included.

- The <u>current</u> DDTC License application form The form should be completed electronically using the DDTC-published guidelines for the particular type of license that is required for the transaction (DSP-5 for permanent export, DSP-73 for temporary export, or DSP-61 for temporary import). The published guidelines on the <u>DOS website</u>, provide detailed block-by-block information on how to complete the required license application form.
- A draft cover-letter explaining the reason for the license application The cover-letter describes the commodity, technical data or software that is to be exported, the entities/organizations and countries who are participant in the transaction, and the specific reason for the transaction, such as an International Agreement or a contractual requirement.
- A one-page technical description of each commodity line-item to be exported If the export is a commodity, a picture or a drawing is required as a .pdf attachment.

When multiple items are to be exported, attach supporting technical data sheets and pictures/drawings for each item in the same order that they are listed as lineitems in the license application. Also, title these attachments with the same lineitem name that is used in the license application, so that it is easy for the reviewer to identify which technical data sheets and pictures/technical data should be aligned with each line-item. This saves time and eliminates confusion when the transaction involves the export of numerous items.

- Copies of any Domestic or International SAAs
- Any other relevant documents or briefings that describe the transaction, the item, program, or the intended outcomes

3.3.7.2. EAR LICENSE APPLICATIONS:

The EAR license application package consists of the following items to submit a license to BIS electronically. Use <u>Checklist H</u> to ensure that all information is included.

- Draft a letter of explanation provided as a Microsoft Word document with specific license application information to include:
 - i. A brief description of the export transaction, involved parties, locations, the dollar value, and when it must be exported with an explanation of why
 - ii. An impact statement that explains the ramifications if the export transaction does not occur or if it does not occur when planned
- Shipping information about the transaction and the parties involved:
 - i. The expected or possible port(s) of exit
 - ii. <u>Intermediate Consignee(s)</u>: the name and address of each organization that will be involved with the movement of the items to be exported (both domestic and foreign)
 - iii. Ultimate Consignee: name and address
 - iv. End User: name and address
- A complete and detailed description of the end-use intended by the ultimate consignee/and or end-user(s) and any countries for which reexport is requested
- Detailed information about each of the items that will be transferred:
 - i. ECCN that corresponds to the item that is to be exported

- ii. <u>Composite Theortical Performance</u> (CTP) Enter the <u>Adjusted Peak</u>

 <u>Performance</u> (APP) if the item is a digital computer or equipment containing a computer. If the item is not and does not contain a computer enter "N/A" for not applicable. Model Number: Enter the model number of the item to be transferred.
- iii. Commodity Classification Automated Tracking System (CCATS) Number: If the item previously received a commodity classification determination from BIS, provide the CCATS number shown on the classification issued by BIS. If there has been no known BIS classification enter "N/A".
- iv. Quantity: Identify the number of items to be exported or reexported.
- v. Units: A unit of issue that is commonly used in trade such as "each"
- vi. Unit Price: Provide the fair market value of the item to be exported rounded to the nearest whole dollar amount. Provide exact unit price only if the value is less than \$0.50. For example, if the unit price is \$0.45, write \$0.45 as the unit price. If the unit price is \$0.65, round up to one dollar.
- vii. Total Price: The unit price multiplied by the quantity to be exported
- viii. Manufacturer: Provide the name of the manufacturer, if known, otherwise, enter "Unknown."
 - ix. Technical Description: Provide a brief description of the item.
- A technical datasheet for each line item that is to be exported must be attached to
 explain the purpose of the item and detailed information, such as physical
 dimensions, weight, and key operating characteristics. The data sheet should
 generally not exceed one page and should be provided in Microsoft Word format to
 allow any minor edits if needed.
- Supporting technology information sheets and pictures/drawings for each item
 listed in the same order as line items in the license application; title these
 attachments with the same line item name that is used in the license application so
 that it is easy for the reviewer to identify which technical data sheets and
 pictures/technical data should be aligned with each line items. This can save time
 and eliminate confusion when the transaction involves the export of numerous
 items.

The license application process is illustrated in Figure 12.

3.3.8. TRACKING LICENSE APPLICATIONS

Once a license is submitted to the appropriate authority, Centers can track the status of their license applications through online systems: for ITAR, use Export License Status Advisory (ELISA) and for EAR, use System for Tracking Export License Applications (STELA).

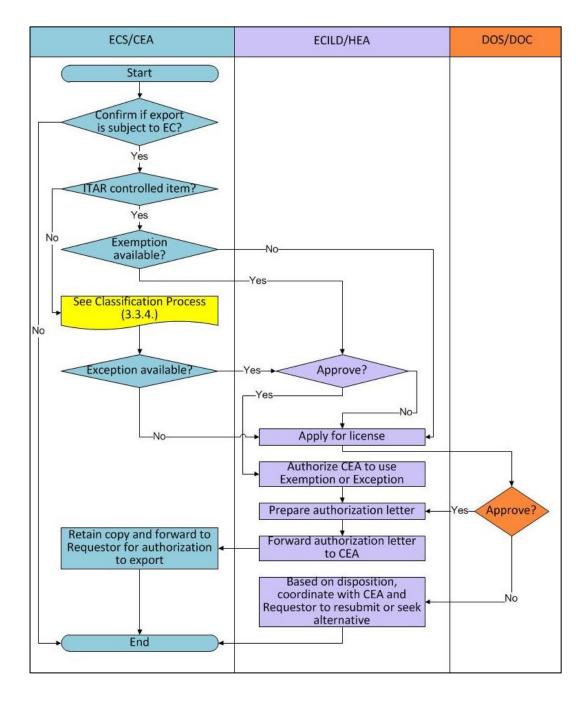


Figure 12: License Application Process

3.4. AUTOMATED EXPORT SYSTEM (AES) FILING PROCESS

AES filing information is used by DOC's Bureau of the Census to compile international trade statistics and regulatory enforcement information. It is also used for verification by U.S. Customs and Border Protection (USCBP) that the transaction occurred as reported. Furthermore, DOC, DOS, USCBP, and Department of Treasury (DOT) use this information to monitor and track export activities and the use of export licenses, exemptions and exceptions. NASA places emphasis on proper processing of Electronic Export Information (EEI) through the AES because this is an activity in which the risk of export violations can be high. This is because

multiple parties across NASA need to work together to ensure compliance with U.S. export laws. The NASA parties involved include the Requestor, ECS, and an AES filer. Figure 13 illustrates the AES filing process.

Requestors inform their Center ECS when an international shipment needs to occur. To determine when AES filing is required, the filer should use Checklist I

IMPORTANT: To ensure NASA compliance with U.S. export regulations, the AES filer must file the EEI in AES when required, in an accurate and timely manner.

as a guide; consult the latest version of the regulations to determine/confirm if AES filing is required. AES filing is commonly required in transactions that involve international shipments containing licensable items, claiming certain ITAR exemption/EAR exception, or exports with a value greater than \$2,500 per individual Schedule B. If it is determined that AES filing is required, the filer coordinates with the Requestor and/or the Center ECS regarding any incomplete or unclear information related to the transaction.

Checklist I: AES Filing Requirement Determination		
If you mark "Yes" to any of the below options, AES filing is required:		
EAR Requirements (15 CFR §758.1 (b))) (1) For all exports of items subject to the EAR that are destined to a country in Country Group E:1 of Supplement No. 1 to Part 740 of the EAR regardless of value;	□ Yes	□ No
(2) For all exports subject to the EAR that require submission of a license application, regardless of value or destination;	☐ Yes	□ No
(3) For all exports of 9x515 or "600 series" items enumerated or otherwise described in paragraphs .a through .x of a 9x515 or "600 series" ECCN regardless of value or destination, including exports to Canada;	□ Yes	□ No
(4) For all exports under license exception Strategic Trade Authorization (STA);	☐ Yes	□ No
(5) For all exports of commodities and mass market software subject to the EAR when the value of the commodities or mass market software classified under a single Schedule B Number (or Harmonized Tariff Schedule (HTS)) is over \$2,500, except as exempted by the Foreign Trade Regulations (FTR) in 15 CFR §30 and referenced in paragraph (c) of this section;	□ Yes	□ No
(6) For all exports of items subject to the EAR that will be transshipped through Canada to a third destination, where the export would require EEI or license if shipped directly to the final destination from the United States (see 15 CFR 30.36(b)(2) of the FTR);	□ Yes	□ No
(7) For all items exported under authorization Validated End-User (VEU); or	☐ Yes	□ No
(8) For all exports of tangible items subject to the EAR where parties to the transaction, as described in §748.5(d) through (f) of the EAR, are listed on the Unverified List (supplement 6 to part 744 of the EAR), regardless of value or destination.	□ Yes	□ No

(9) For items that fall under ECCNs that list CC Column 1 and 3 and RS Column 2 (see supplement no. 1 to part 738 of the EAR) as reasons for control and such items are for export, regardless of value, to India.	☐ Yes	□ No
For shipments under EAR exceptions, excluding EAR license exception BAG §30.2(a)(iv) (B-G)):	and TMP <u>(F1</u>	<u>R</u>
(B) Requiring a DOS, DDTC license under the ITAR	☐ Yes	□ No
(C) Subject to the ITAR, but exempt from license requirements.	☐ Yes	□ No
(D) Requiring a Department of Justice, Drug Enforcement Administration (DEA) export permit (21 CFR 1312).	☐ Yes	□ No
(E) Destined for a country listed in Country Group E:1 as set forth in Supplement 1 to 15 CFR 740.	☐ Yes	□ No
(F) Requiring an export license issued by any other federal Government agency.	☐ Yes	□ No
(G) Classified as rough diamonds under 6-digit Harmonized System (HS) subheadings 7102.10, 7102.21, and 7102.31	☐ Yes	□ No
If value is greater than \$2500 per Schedule B, licensable or non-licensable (FTR §30.37(a))	☐ Yes	□ No
Shipment to Puerto Rico or to U.S. Virgin Islands (FTR §30.2)	☐ Yes	□ No
See below for examples of situations when AES filing is probably not re exhaustive list and Customs reserves the right to require AES filing for normally require AES filing:	•	
Miscellaneous Exemptions (See <u>FTR 30.37</u>)	☐ Yes	□ No
Special exemptions for shipments to the U.S. Armed Services (See <u>FTR 30.39</u>)	☐ Yes	□ No
Special exemptions for certain shipments to U.S. government agencies and employees (See <u>FTR 30.40</u>)	☐ Yes	□ No
Below \$2500 per Schedule B, if not subject to an ITAR / EAR export license	☐ Yes	□ No

Export of technical data and defense service under the ITAR DSP-5 license, Technical Assistance Agreement or TAA exemption, but must report electronically directly to DDTC in accordance with 22 CFR §123.22(b)(3)(iii).	☐ Yes	□ No
Shipping to Canada, if not subject to an ITAR / EAR export license or is EAR / ITAR controlled but exempt from licensing, excluding all 500 and 600 series items in the CCL (FTR §30.36).	☐ Yes	□ No
For EAR Shipments exempt from AES Filing see 15 CFR 758.1(c):		
(1) License Exception Baggage (BAG), as set forth in §740.14 of the EAR. See 15 CFR 30.37(x) of the FTR;	☐ Yes	□ No
(2) License Exception Gift Parcels and Humanitarian Donations (GFT), as set forth in §740.12 of the EAR. See 15 CFR 30.37(h) of the FTR;	☐ Yes	□ No
(3) License Exception Aircraft and Vessels (AVS), as set forth in §740.15 of the EAR. See 15 CFR 30.37(o) (5) of the FTR;	☐ Yes	□ No
(4) License Exception Governments and International Organizations (GOV), as set forth in §740.11 of the EAR. See 15 CFR 30.39 and 30.40 of the FTR;	☐ Yes	□ No
(5) License Exception Technology and Software Under Restriction (TSR), as set forth in §740.6 of the EAR. See 15 CFR 30.37(f) of the FTR; or	☐ Yes	□ No
(6) License Exception Temporary Imports, Exports, and Reexports (TMP) "tools of trade", as set forth in §740.9(a)(1) of the EAR. See 15 CFR 30.37(b) of the FTR.	☐ Yes	□ No

The Transportation/Logistics Office creates and maintains the required export documents, such as the shipping form, invoice, and airway/ocean bill of lading for all international shipments, and provides a copy to the Requestor and the Center ECS. Center ECS provides the Center Transportation/Logistics office the appropriate authorization and classification for the items, which should be included on the shipping documents. The AES filer completes the EEI according to the ECS/CEA instructions as well as fulfilling all other requirements. Checklist J can be used as a guide to ensure that all necessary information is gathered for the filing. Center Transportation/Logistics will maintain the shipping records, to include the corresponding export authorization, (see Section 3.4.3.) and send the Requestor notification of the shipment.

Filers must complete the filing within the required timelines depending on the mode of transport:

- Air or truck shipments. The export information must be electronically filed at least
 eight hours prior to departure for all ITAR-controlled shipments. For EAR-controlled
 shipments, the export information should be electronically filed two hours prior to
 the scheduled departure by air and one hour prior to arrival at the border for trucks.
- Sea or rail Shipments. The export information must be electronically filed at least 24 hours prior to departure for all ITAR-controlled shipments. For EAR-controlled shipments via sea, AES must be filed 24 hours prior to the loading of the cargo at the U.S. port. For EAR shipments via rail, the information should be filed electronically no later than two hours prior to when the train arrives at the border.
- For used self-propelled vehicles, the information must be filed electronically at least
 72 hours prior to the export.
- Emergency shipments of commodities that cannot meet the pre-departure filing requirements above are possible with USCBP permission. Before seeking USCBP permission, the CEA must coordinate with ECILD to provide DDTC with immediate notification of the External Tracking Number (XTN) or Internal Transaction Number (ITN) for the shipment and rationale for the urgent movement, as specified in 22 CFR §123.22(b)(2). For USCBP to consider permitting emergency shipments they must have the EEI using the AES and the following documentation presented to them at the port of exit: the ITN for the shipment and a copy of a notification to DDTC stating that the shipment is urgent, accompanied by an explanation for the urgency. The AES filing of the export information must be made at least two hours prior to any departure by air from the U.S. When shipping via ground, the AES filing must be

made at the time when the exporter provides the articles to the carrier or at least one hour prior to departure from the U.S., when the permanent export of the commodity that has been authorized for export.

Figure 13 illustrates the AES filing process.

3.4.1.1. GOODS EXPORTED UNDER A PERMANENT EXPORT LICENSE (DSP-5).

All permanent export licenses must be *lodged*²² with Customs prior to filing of the EEI to ensure proper electronic decrementation²³ of the license through the AES system, in accordance with <u>22 CFR §123.22(1)</u>. Not all EAR licenses require lodging nor presentation to Customs because they are electronically-decremented through AES.

3.4.1.2. GOODS EXPORTING UNDER TEMPORARY EXPORT LICENSE (DSP-73).

Carrier/Forwarders facilitating the movement of the goods must have a copy of the temporary export license to be deposited,

decremented and endorsed by Customs at the Port of Exit prior to departure and upon re-entry, and obtain a copy of the license endorsed by Customs from the carrier/forwarder in accordance with 22 CFR §123.22(2). Not all temporary export licenses need to be lodged with U.S. Customs, but they must be presented²⁴ at the time of export and upon re-entry for

IMPORTANT: Copies of hand-decremented licenses must be sent to the relevant CEA and forwarded to the HEA no later than 15 days after the license expires.

manual decrementation and endorsement by U.S. Customs. AES does not electronically decrement temporary licenses.

Carriers/forwarders should check that all parties to the export are on the license, such as carrier/forwarder, end user, and ultimate and intermediate consignees in accordance with $\underline{22}$ CFR 127.1(b)(1) and (c).

²² Lodged means providing a copy of the export license with a stamped "original" to U.S. Customs.

²³ To decrement a document means to subtract the value of items being shipped from the value that is authorized to be exported in the license.

²⁴ Presented means physical presentation to U.S. Customs at time of export and entry.

3.4.1.3. AES FILING BEST PRACTICES

- Verify that the description and value of the goods on the shipping document matches the license.
- Verify the correct Schedule B, ECCN, or USML Category.
- Verify with the carrier/forwarder the correct port of export and the airline/vessel
 Standard Carrier Alpha Code (SCAC)/International Air Transportation Association (IATA) code.
- If using a freight forwarder to move the goods, obtain their Employer Identification Number (EIN) and identify them on your AES filing as the Freight Forwarder.
- Upon completion of the verification process of the required EEI, the filer may then proceed with the filing of the AES.
- Upon completion of the AES filing, the filer should then complete and sign <u>Checklist J</u> and attach it with the AES filing copy.
- Once the AES entry is completed, the Center Transportation/Logistics Office proceeds in the preparation of the required export documentation (e.g. shipping form, invoice, airway bill, HAZMAT, and AES copy) and provides the carrier with the export documentation for the applicable method of transport (air or ocean) and files the record accordingly.
- Verify that all information shown on the EEI filing is accurate, true, and complete.

3.4.2. GOODS EXPORTING UNDER AN AES FILING EXEMPTION.

All export documents (including the shipping form) must be annotated with the appropriate AES Exemption citation in accordance with <u>15 CFR §30.7</u>. (e.g. "No EEI Required, FTR §30.37(b)").

3.4.3. RECORDKEEPING REQUIREMENTS FOR SHIPMENTS

In accordance with U.S. export regulations related to recordkeeping, all documents related to an international shipment must be retained for a period of five years and must be available upon request by a U.S. Government official (15 CFR §30.10). All documentation shall be retained and maintained by the Transportation Office/ECS (listing of documents is below) (15)

<u>CFR §30.10</u>). The ECS also retains a copy of the transaction documentation (e.g. shipping form, invoice, airway bill and copy of AES filing document [if applicable]) in their files for internal review purposes only (<u>15 CFR §30.10</u>). All documents and correspondence relating to an international shipment, licensable and non-licensable, must be filed by the shipping date upon completion and labeled according to the Shipment Reference number. No records may be discarded without the prior approval of both the Transportation Officer and the CEA (<u>15 CFR §30.10</u>). The required documents for recordkeeping are as follows:

- Shipping form
- Export authorization, which must be identified on the shipping form
- Copies of temporary licenses that have been decremented and endorsed by Customs
- Invoice with the appropriate DCS and AES ITN or exemption/exception citation;
- <u>Checklist I</u> and <u>Checklist J</u> (if applicable)
- Bill of lading

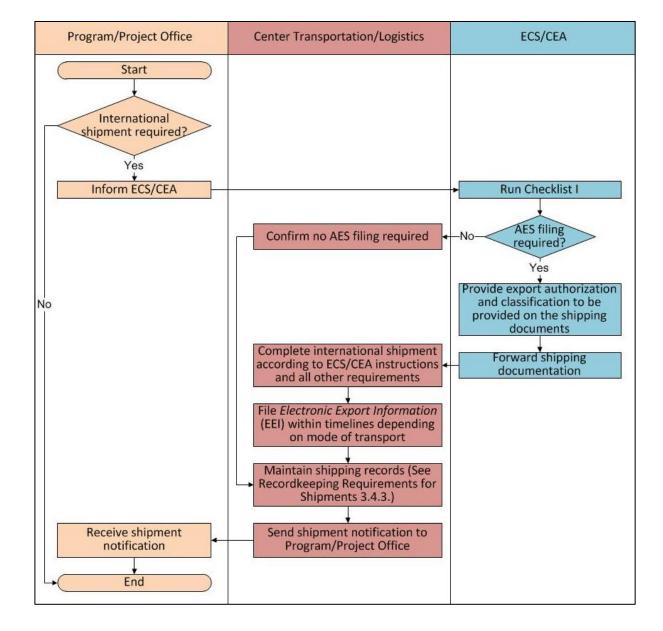


Figure 13: Process for AES Filing²⁵

²⁵ Depending on a Center, the AES filer may be under Center Transportation, Logistics, or a different organization.

3.5. RECORDKEEPING

Under Agency and Center policies, all employees who manage records have responsibilities with regard to the maintenance of those records (NPD 1440.61 "NASA Records Management"). Examples of official export control records (originals or reference copies) include:

- Recording of the use of exemptions or exceptions for exports other than shipping
- Forms used to document export classifications of commodities or engineering drawings
- Copies of licenses obtained for the Centers by ECILD
- Email responses to ECILD requests (e.g., Wassenaar reporting)
- Results of restricted party screenings
- Confirmation of AES filings
- Miscellaneous export shipping paperwork
- Meeting minutes and sign-in sheets
- Results from audits or contractor export control activity

3.5.1. RECORDKEEPING UNDER THE ITAR

Under the ITAR, refer to 22 CFR §122.5 for the recordkeeping requirement. Typically, all records subject to this section are retained for five years from the expiration date or from the date of the last transaction.

3.5.1.1. LICENSES

A license is valid until the total value or quantity has been shipped or when the expiration date has been reached, whichever comes first. Refer to 22 CFR §123.21 and §123.22, for direction on license duration and recordkeeping.

3.5.1.2. EXEMPTIONS

Any person engaging in any export, reexport, transfer, or retransfer of a defense article or defense service pursuant to an exemption must maintain records of each such export, reexport, transfer, or retransfer (22 CFR §123.26). The records shall, to the extent applicable to the transaction and consistent with the requirements of 22 CFR §123.22, include the following information:

- A description of the defense article, including technical data, or defense service
- The name and address of the end-user and other available contact information (e.g., telephone number and electronic mail address)
- The name of the natural person responsible for the transaction
- The stated end-use of the defense article or defense service
- The date of the transaction; if it is a defense service, a date range is acceptable.
- The EEI (XTN), if applicable
- The method of transmission (e.g. email, phone, or shipment)
- The person using or acting in reliance upon the exemption shall also comply with any
 additional recordkeeping requirements enumerated in the text of the regulations
 concerning such exemption (e.g., requirements specific to the Defense Trade
 Cooperation Treaties in 22 CFR §126.16 and §126.17).
- NASA HEA Control Number

3.5.2. RECORDKEEPING UNDER THE EAR

Generally, all records required to be kept by the EAR must be retained for five years from the last activity on a specific transaction. The scope, types of records to be retained, and retention periods are specified in 15 CFR \\$762. Refer to the BIS website for compliance guidelines with special attention to recordkeeping, including a listing of general export-related records.

3.5.3. RECORDKEEPING FOR NASA PROPERTY DISPOSAL

For NASA-owned property held internationally, the associated programmatic and shipping documents must be retained by the program/project offices.

3.5.4. EXPORT CONTROL RECORDS AND SENSITIVE BUT UNCLASSIFIED INFORMATION (SBU)

Export-controlled information is one type of information that can be classified as SBU. Any records designated as SBU shall be handled and stored in accordance (NID) 1600.55. With regard to recordkeeping, Section 5.24.1.3 of this NID specifically states that "information designated as SBU shall be stored, accessed, disclosed, and transmitted in accordance with section 5.24.4, and de-controlled or destroyed in accordance with section 5.24.5."

3.6. REPORTING REQUIREMENTS

NASA is responsible for preparing and submitting various reports mandated by U.S. export control regulations, as well as U.S. international commitments. There may be specific reporting requirements associated with the use of an export license exemption or exception, requirements contained as a proviso or conditions of a license, or required in an International Agreement. The CEA collects the required information, prepares the reports, and submits them directly to ECILD, who then forwards them to the applicable regulatory agency.

3.6.1. ITAR REPORTING REQUIREMENTS

There are numerous ITAR reporting requirements. It is essential to accurately and efficiently report transactions on demand at the request of DDTC in accordance with <u>22 CFR</u> §122.5.

The use of certain DOS licenses and exemptions must be reported as indicated below:

- Technical data license Prior to first use of a DSP-5 license for the export of technical data, NASA HQ will notify DDTC of the initial export and reference the relevant license number. CEAs will follow instructions provided in their license transmittal letters (22 CFR §123.22(b)(3)).
- ii. Technical data and defense service exemptions. Prior to using an exemption (e.g., 22 CFR §125.4(b)(2), §125.4(b)(4), §126.5) for the export of technical data or providing a defense service, NASA HQ must notify DDTC of the export and the exemption. A copy of this notification, along with other required shipping documents (e.g., invoice, declaration statement, etc.) must accompany technical data shipments and be made available to U.S. Customs and Border Protection upon request.
- For licenses that have not been decremented electronically by U.S. Customs and Border Protection through AES (e.g., decremented by hand or oral/visual technical data releases), NASA HQ must return the license back to DDTC, or the Government agency with which the license was filed, to include when the total authorized value or quantity has been shipped or upon expiration (22 CFR §123.22(c)(2)). This will be accomplished according to instructions in their license transmittal letters (22 CFR §123.22(b)(3)). However, a license that has not been used at all, does not have to be returned even when expired.

3.6.2. EAR REPORTING REQUIREMENTS

The <u>Wassenaar Arrangement</u> on Export Controls for Conventional Arms and Dual-Use Goods and Technologies is one of four multilateral export control regimes. The Arrangement's purpose is to contribute to regional and international security and stability by promoting transparency and greater responsibility in transfers of conventional arms, <u>dual-use</u> goods, and technologies. The Wassenaar Arrangement establishes lists of items for which member countries apply export controls. The Wassenaar members share with other members reports on exports of items on the Sensitive List (<u>15 CFR Supplement No. 6 to §774</u>) to countries that are not Wassenaar members, when certain license types or license exceptions are used. These are:

- License Exceptions: Shipments to Country B Groups (BGS), Civil end-users only (CIV),
 Technology and software under restriction (TSR), Shipments of Limited Value (LVS),
 Computers (APP), and the Cooperating Government portions (15 CFR §740.11(b)(2)(iii)) and 15 CFR §740.11(b)(2)(iv) of License Exception GOV. Exports of technology and source code under License Exception TSR to foreign nationals located in the U.S. should not be reported.
- The Special Comprehensive License procedure (see 15 CFR §752)
- The Validated End-User authorization (<u>see 15 CFR §748.15</u>)
- License Exception STA (see 15 CFR §740.20)
- Thermal-imaging cameras that are not authorized by Individual Validated Licenses; and the report must provide the information identified in <u>15 CFR §743.3(d)</u>.

The report includes the following information (see <u>Figure 14</u>):

- The ECCN and paragraph reference as identified in the CCL
- Number of units in the shipment
- Country of ultimate destination

 Item Name/Description
 ECCN #
 Quantity
 Destination Country

 Machine Tool Software
 2D001
 1
 Costa Rica

Figure 14: Sample CEA Submission Response

The HEA solicits inputs from the CEAs twice each year for NASA's contribution to Wassenaar reporting. The first report is due by July 15th for the period January 1st through June 30th of the calendar year. The second report is due by January 15th for the period July 1st through December 31st of the preceding calendar year. ECILD submits consolidated Agency-level Wassenaar Reports to DOC by the last day of January and July of each year. If the Center has had no exports of sensitive list items to non-Wassenaar member countries under the above identified authorizations, then the CEA simply replies "nothing to report."

3.7. PROCESS FOR VOLUNTARY DISCLOSURES²⁶

DOS and DOC strongly encourage the voluntary disclosure of information by persons or entities that believe that they may have violated any export control provisions. Examples of violations or suspected violations that may require notification are:

- Unauthorized foreign national access to export-controlled materials [technical data, technology, commodities, software or defense services]
- Violations of license requirements

It is important to let regulators know when, where, and how export-controlled materials are compromised, so that countermeasures might be taken to neutralize or minimize potential adverse national security impacts, as appropriate. These disclosures can be considered as a mitigating factor in determining criminal, civil, or administrative penalties that may be imposed. Both regulatory agencies recognize that making voluntary disclosures is a sign of a healthy and vital export compliance program. NASA has a long history of close coordination with the export control regulatory agencies regarding voluntary disclosures.

 $^{^{26}}$ The DOS uses the term "voluntary disclosure" while the DOC uses the term "voluntary self-disclosure".

It is the responsibility of all NASA employees to notify their CEA if they have knowledge of or suspect a potential violation of any export control provisions of the ITAR or EAR. This notification is the first step in the overall voluntary disclosure process. Once informed, the CEA immediately notifies the HEA of the potential violation and proceeds to gather the information

IMPORTANT: It is the responsibility of all NASA employees to notify their CEA if they have knowledge of or suspect a potential violation of any export control provisions of the ITAR or EAR.

surrounding the incident. Once the HEA has been notified of a potential voluntary disclosure, he or she will notify the Headquarters Export Counsel and NASA senior management, as well as the Office of the Inspector General (OIG), as appropriate. He or she then directs ECILD to enter the case into the ECSD and assign a NASA case tracking number. The case number identifies the Center, the calendar year, and number of disclosure within the same year. In addition to documenting this case in the ECSD, ECILD also creates an electronic file folder to maintain all correspondence associated with the case in accordance with 22 CFR §122.5 and 15 CFR §762.6.

Within five days of initial notification, the CEA prepares a statement of the incident and reviews the case with the HEA to determine if there is, in fact, a violation that requires a disclosure to either DOS or DOC, depending upon the type of export violation. The incident summary should explain when, where, and how the potential violation occurred, as well as the parties identified and their roles as specified in 15 CFR §762 and 22 CFR §127.12(c)(2). Also, any interim or permanent actions undertaken to prevent recurring or future violations should be described.

The CEA and HEA will review the facts, and determine, within 30 days of the CEA's initial summary submission, whether a voluntary disclosure or notification is warranted. If it is determined that there is no violation, correspondence to this effect is provided to the CEA by the HEA, and the case is closed in the ECSD, with supporting documentation filed in the electronic file folder.

However, if warranted, the HEA may request additional information and submit an initial notification of potential voluntary disclosure to the appropriate regulatory agency (DOS for ITAR matters; DOC for EAR matters), as well as to NASA's OIG. A copy of this notification is provided to the CEA, the Center Director, the Associate Administrator for International and Interagency Relations, and the Assistant Administrator for Protective Services. The CEA may continue his or her investigation, but is formally tasked by the HEA to submit a final report of findings to the HEA within 30 days of submission of the initial NASA voluntary disclosure notification to the regulatory authority. The HEA prepares and submits a formal voluntary

disclosure to the appropriate regulatory agency and to the NASA OIG within 60 days of the initial voluntary disclosure notification.

Voluntary disclosures, which are prepared and submitted pursuant to section <u>15 CFR</u> <u>§764.5</u> of the EAR and section <u>22 CFR §127.12</u> of the ITAR, generally include the following elements:

- A description of the nature of the violation
- The circumstances surrounding the violation (i.e., why, when, where, and how the violation occurred)
- The identities of all persons involved in the activities giving rise to the violation
- Any relevant regulatory licenses or authorizations involved
- The commodities, software, technical data, technology, and/or defense services involved
- A description of corrective actions undertaken to address the causes of the violations and how these corrective actions will deter similar violations in the future

After the appropriate regulatory agency has been provided the final disclosure document with a full narrative account and supporting documentation, the regulatory agency responds by acknowledging receipt of the disclosure notification with official correspondence that assigns a case number for tracking purposes and a point-of-contact with the relevant contact information.

Once ECILD has received the regulatory agency disposition on the case, the responsible CEA is notified and measures are taken to comply with additional directions provided by the regulatory agency, as appropriate. The HEA will confirm that the relevant Center has complied with the disposition. Once the HEA receives confirmation, he or she closes the case in the ECSD and all documents are filed in the NASA HQ electronic case file folder.

See Figure 15: Process for Voluntary Disclosure.

Discloser ECS/CEA ECILD/HEA DOC/DOS **Timeline** Start **Notify CEA** Research facts Day 1 Notify HEA **Enter in ECSD** Prepare summary Day 1-5+ Review with HEA Violation? No Comply with **Notify Discloser** Notify CEA CEA notification Yes Send initial disclosure to By Day 30 DOC / DOS Research facts & Forward case number to Assign case prepare final CEA Day 30-60 CEA number report Prepare final disclosure By Day 60 Submit final disclosure Send disposition to CEA Comply with Determine directions in disposition Comply with directions from DOC / DOS disposition Confirm Center Day 60+ compliance Close case in ECSD File all documents End

Figure 15: Process for Voluntary Disclosure

3.8. PROCESS FOR LOST OR STOLEN EXPORT-CONTROLLED COMMODITIES

When a CEA is notified about lost or stolen export-controlled material, he or she should begin the process of collecting information surrounding the event, ascertain which export-controlled information may have been compromised, and prepare a report for ECILD. The HEA, if necessary, would notify the appropriate regulatory authority.

3.9. PROCESS FOR AUDITING

ECILD oversees annual audits of NASA's ECP compliance. The purpose of the audit is to ensure adequacy of the overall NASA ECP, verify via sampling that required screening and licensing procedures are regularly followed, and to ensure that required documents are maintained in compliance with the requirements of the ITAR and the EAR. The audit verifies that appropriate records of all exports or transfers effected in support of NASA international programs and activities with foreign persons are maintained in accordance with NPD 2190.18 Chapter 7.

In accordance with NPD 2190.1B, each Center Director will designate a qualified individual as an Export Control Auditor (ECA) to annually review the operation of the NASA Export Control Program at that Center during the previous calendar year. The individual(s) selected by the Center Director to serve as the Center ECA to perform the Annual Audit should have received audit training and have previous auditing or inspection experience. At a minimum, the appointed auditors should have participated in an ISO 9000 internal auditor course or other comparable auditor training. Individuals without appropriate training should not be selected, except in exceptional circumstances. The selected ECAs must not have directly performed any of the actions that are being audited. Furthermore, the ECA must not be an individual (civil servant or contractor) whose performance is evaluated by someone in the Center's Export Control organization. Center Directors should make ECA appointments in writing, and CEAs should inform the HEA of such appointments, as early in January of each year as possible.

Each January, the HEA transmits audit guidance to the CEAs indicating the date by which audits of the previous calendar year are to be completed and forwarded to ECILD (see NPR
2190.1B Paragraph
7.2). The HEA also provides specific information that is to be the focus of the ECA in the form of an audit module NPR
<a href="2190.1B Paragraph
7.3.1.h. The CEA ensures that the HEA audit guidance is provided to the ECA. The CEA forwards the final audit report to ECILD within 60 days from the receipt of the final report. The HEA ensures that the results of the audit reports are reviewed, analyzed, and presented during the Agency's Annual ECP Review to

highlight program strengths and weaknesses with a focus on opportunities for program improvement. Center Directors oversee disposition of the findings from this audit.

3.10. PROCESS FOR INTERAGENCY REVIEW OF STATE LICENSES

In addition to submitting license applications to the DOS for export licenses, NASA participates in the DOS interagency license approval review process. When DOS DDTC receives a NASA-related license application, such as from industry, it requests NASA to review and comment, asking for the Agency's recommendation for approval or approval with provisos, Return Without Action (RWA), or denial. This license review process provides NASA with an opportunity to ensure Agency equities and programmatic objectives are appropriately addressed in export license applications that support NASA program execution. The review process starts when ECILD receives a license application for review from DDTC for a permanent export license (DSP-5), temporary import license (DSP-61), temporary export license (DSP-73), general correspondence license (GC), or other regulatory submissions from DOS through the U.S. Exports System (USXPORTS). NASA must respond within 15 calendar days of the DDTC staffing date, to ensure NASA's recommendations are considered by DDTC in its license review and approval process. Upon receiving a request, ECILD:

- Records the receipt of the request in the ECSD,
- Scans the application documentation and generates an electronic file,

IMPORTANT: All NASA reviewers of DOS licenses must have NASA encryption capability.

- Determines the appropriate internal reviewers and contacts the appropriate Mission Directorate(s) and the CEA(s) to coordinate the reviews,
- Works with the Mission Directorate(s), CEA(s), and the reviewers to prepare Agency's response,
- Submits Agency's response to DOS, and
- Records the completion of the action in ECSD.

CHAPTER 4: EXPORT CONTROL TRAINING PROGRAM PLAN

4.1. TRAINING OVERVIEW

NASA's export control training focuses on the effective implementation of Agency's Export Control Program (ECP) in accordance with NPR 2190.1B and NAII 2190.1. The training provides consistent Agency-wide guidance to implement policies and processes as dictated by U.S. laws and regulations. The training program ensures that employees are aware of the following key factors:

- U.S. export control laws and regulations
- NASA's export control policies and processes
- Points of contacts and other export control resources

The Agency's export control training program is multi-tiered with targeted training for both non-export control and export control staff. Each tier consists of multiple levels of online and instructor-led training. The tiered approach aligns with multiple roles and responsibilities within the Agency who directly or indirectly engage in export control activities in support of their organization or mission.

The Tier 1 training is developed and conducted in-house. It consists of three stand-alone trainings:

- Export Control Awareness for all Employees
- Export Control: Management Awareness
- Export Control Processes: On-the-Job Training

The Tier 2 training is intended for ECS specifically and consists of two external trainings:

- Training for Center Export Administrator
- Training for Export Control Representative

Figure 16 represents NASA's tiered training program and the following sections describe each training.

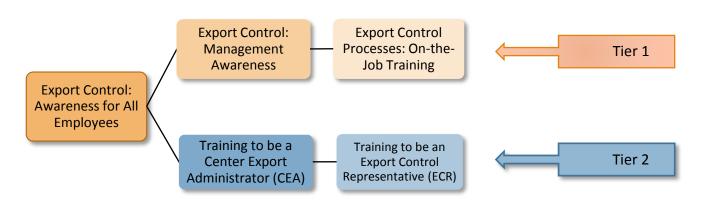


Figure 16: NASA's Export Control Training Program

4.2. EXPORT CONTROL AWARENESS FOR ALL EMPLOYEES

Due to its core mission with technology and science focus and international collaboration, NASA has the responsibility to emphasize the importance of Export Control regulations to all its employees. The Export Control Awareness training is required as part of the annual security training conducted by OPS. The training is conducted online via SATERN as a stand-alone module within OPS security training.

4.3. EXPORT CONTROL: MANAGEMENT AWARENESS

This training is intended for senior executives to mid-level management across the Agency including Center and Mission Directorates. The training demonstrates management commitment to effectively implement the Agency's export control policies and processes across all organizations and program/projects.

The training identifies the following key management elements:

- Export control delegation of authority across the Agency
- Responsibility to dedicate export control resources

- Ensure that all personnel are familiar with roles and responsibilities per NPR 2190.1B and processes per NAII 2190.1
- Ensure staff completes relevant training in a timely manner

The training is available online via SATERN and blended with face-to-face briefing with an ECILD official or a CEA.

4.4. EXPORT CONTROL PROCESSES: ON-THE-JOB TRAINING

This training is intended to train the personnel on the processes specified in this document. Accordingly, the training is tailored for Agency's non-export control and the export control staff.

The CEAs play an active role in executing On-the-Job training and are responsible for:

- Determining the requirement for the training on as-needed basis
- Conducting the training with face-to-face instructions. CEAs may also designate an alternate to conduct the training.
- Customizing the standardized content and best practices by inserting Center-specific instructions.

4.4.1. TRAINING ORGANIZATION

Due to the diversity of roles amongst the targeted audiences, the training is divided into two courses three modules to meet the unique needs of each audience. Module 1 serves as an introduction to export control and couples with Module 2 describes processes for non-export control staff. Module 3 is specifically tailored for the export control community of CEAs, ACEAs, ECR/CERs, and other ECS. The training modules align with chapters one, two, and three in NAII 2190.1.

Each module is further broken down into multiple training topics. The training topics are grouped together based on common themes. To accompany the topics, learning objectives, knowledge checks, and learning activities are included throughout the training to enhance learning.

4.4.2. Training Materials for Instructors and Participants

The online SATERN content includes prepared presentation slides with embedded instructor talking points. The instructor talking points assist the trainer to convey the key points on each slide. Instructors are provided additional materials to conduct the training and include: instructor handouts, student handouts, and learning activities. These resources are accessible online. Instructors can print out hard copies or disseminate the information electronically.

While the training helps train the participants on the standardized export control processes, the training allows and encourages instructors to supplement it with Center-specific learning content. For example, instructors may choose to modify learning activities to reflect Center-specific scenarios or choose to specify Center-specific forms and systems to meet the intent of flowcharts and checklists for specific processes.

4.5. CENTER EXPORT ADMINISTRATOR (CEA) TRAINING

Within one month of appointment, CEAs are required to participate in training with OIIR personnel to understand the specific responsibilities and regular activities of the CEA position, review regulations and Headquarters_provided briefings, and to understand their application to NASA's programs. The Department of Commerce's Bureau of Industry and Security hosts an online training room http://www.bis.doc.gov/index.php/compliance-a-training/export-administration-regulations-training/online-training-room and newly-appointed CEAs are encouraged to fully utilize this in addition to training material provided by Headquarters export control staff.

Within six months of appointment, CEAs are required to attend one of the "Basics" training conferences offered by the Society for International Affairs and one of the "Complying with U.S. Export Controls" seminars offered by the Department of Commerce's Bureau of Industry and Security. Training programs offered by other suppliers may be substituted for either of these courses with approval from the HEA, but each CEA must attend at least one ITAR- and one EAR-focused training seminar.

CEAs are encouraged to consider certifications through external training resources. The certification usually requires a rigorous and consistent training program and passing a monitored examination.

CEAs are required to attend the Annual Export Control Program Review, as this includes topics important to maintaining compliance with export control regulations and provides best practices that are shared among the NASA export control community.

CEAs are required to attend the Quarterly Export Control Video Conferences, as these provide updates on NASA procedures, export control regulations, status on issues raised during the Annual Export Control Program Review, and provides opportunities for CEAs to raise additional issues or share important compliance information.

4.6. EXPORT CONTROL REPRESENTATIVE TRAINING

The CEAs are responsible to ensure that ECRs are well-versed in EC laws and regulations and with NASA's export control policies and processes. ECRs must complete the necessary training, such as the EC Processes: On-the-Job Training, as described in Section 4.4, and any other Center-sponsored training for export compliance. ECRs are encouraged to attend the Annual ECP Review to keep abreast with the latest information that is shared with the broader EC community.

Some Centers conduct periodic export compliance training specifically targeting the ECRs, these training opportunities are a valuable resource for ECRs across all Centers and should be utilized whenever appropriate.

Supervisors may also encourage ECRs to obtain external training, as appropriate for their level of responsibilities pertaining to export control duties.

Table 5: Summary of ECP Training

Export (Export Control Training	Frequency	Training Delivery	Target Audience
	EC Awareness	Annual	SATERN Online	All Personnel
	EC Management Awareness	Annual	SATERN Online with F2F ECILD or CEA staff	Center & Mission Directors and their management staff including Program & Project Managers
Tier 1 Training	EC Processes:	Requirement identified by the CEAs on as needed basis for program/project and roles and responsibilities	SATERN Online with F2F CEA or his/her designee	Non-EC Personnel
	Training	Requirement identified by the CEAs on as needed basis for program/project and roles and responsibilities	SATERN Online with F2F CEA or his/her designee Available in SATERN video	Export Control Staff including CEAs, ACEAs, ECRs, CERs, and other support staff
Tier 2	CEA Training	As needed	-F2F with OIIR Staff -Annual ECP Review -External Certification Training	CEAs, ACEAs
Training	ECR Training	As needed	-EC Process: OTJ -Center Sponsored -Annual ECP Review -External Training	ECRs, CERs

CHAPTER 5 IDENTIFICATION OF SENSITIVE TECHNOLOGIES & LOCATIONS FOR ADDITIONAL REVIEW

In response to recommendations made by the Government Accountability Office (GAO), NASA has committed to implement a risk-based approach to identifying technologies that warrant additional protection or attention, from an export control perspective. This involves the use of several existing sources of information that, when combined, will aid in risk-informed decision making when considering foreign national access, the need for employee outreach and training, and developing targets for follow-up assessments during annual audits and Integrated Functional Reviews. This process is known as "continuous risk management" (see Figure 17) and is further described in NPR 8000.4A "Agency Risk Management Procedural Requirements." Although this NPR is intended for programmatic or project-related risks, the principals of identifying, analyzing, planning mitigations, tracking progress, enforcing control, communicating and documenting can be adopted, in part, in managing export control risks.

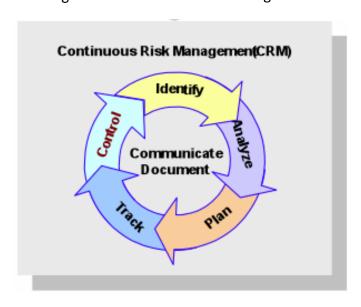


Figure 17: Continuous Risk Management

NASA's export risk management approach, embraces principals outlined in <u>NPR 8000.4A</u>, <u>NPR 1620.2</u>, Facility Security Assessments, and <u>NPR 1620.3A</u>, "Physical Security Requirements for NASA Facilities and Property", in which the risk must be weighed against the cost and operational impact of implementing established minimum-security standards. Risk

management is an integrated process of assessing the threat, vulnerabilities, and value of the resource and then applying appropriate safeguards and/or recommending the assumption of risk.

The first step in this approach is to establish a Center-specific inventory of sensitive technologies. Each CEA should construct a listing of those facilities that, due to the sensitivity of the technology contained therein, warrant heightened attention. This listing will include a rationale for listing (such as NASA Critical Infrastructure (see NPR 1600.1A)), identified as a target of foreign collection, inclusion on the Wassenaar Arrangement Sensitive List, Very Sensitive List or Munitions List, or the Military Critical Technologies List (MCTL). A NASA infrastructure is to be considered critical, or a resource considered key, if its destruction or damage would cause significant impact to the security of the Nation — national economic security, national public health, safety, psychology, or any combination.

The NASA Office of the Chief Technologist has compiled a listing and description of NASA technology investments in their "TechPorts" website, an integrated, Agency-wide software system designed to capture, track, and manage NASA's portfolio of technology investments. TechPorts provides detailed information on individual technology programs and projects throughout NASA and is equipped with features that allow users to efficiently search and browse technology projects, identify technology gaps, and provide comprehensive technology reports. The Wassenaar Arrangement publishes their controls annually and are useful in identifying technologies that have more constrained export requirements.

<u>DOD Instruction 5200.39</u>, Critical Program Information Protection within the DOD, dated July 16, 2008, requires the Defense Security Services (DSS) to publish a report detailing suspicious contacts occurring within the cleared contractor community. A focus of this report is on efforts to obtain unauthorized access to sensitive or classified information. This annual report, *Targeting U.S. Technologies: A Trend Analysis of Cleared Industry Reporting*, constitutes part of DSS' ongoing effort to assist in better protecting the industrial base by raising general threat awareness, encouraging the reporting of incidents as they occur, identifying specific technologies at risk, and applying appropriate countermeasures.

Each Center CI Officer is required to develop an annual threat assessment based upon input from law enforcement and intelligence sources. These assessments also generally identify technologies or trends in technologies that are actively been sought by foreign sources. Together, these disparate sources can assist the CEA in making risk-based decisions on foreign national access and meet the need for heightened attention in audits and outreach.

As the CEA becomes aware of facilities containing sensitive technologies, they will be recorded on a list that will inform subsequent decisions on foreign national access, escort requirements for foreign nationals, or the need for focused export control training. This list will be updated regularly but no less than every two years with input from the CEA, local CI Special Agents, and the local IVC. Figure 18 provides an example of such a listing.

Figure 18: Center-Specific Inventory of Sensitive Technologies

	Example C	enter-sp	ecific in	Example Center-specific inventory of sensitive technologies	tive technolog	ies	
Technology	Location	Rationale: NCI, CI, WA SL, WA VSL, WA MIL,	TechPorts Description	Rationale: NCI, CI, WA TechPorts SL, WA VSL, Description WA ML,	Foreign Participation	ACP	Remarks
Visible and Near Infrared Sensor Technology GSFC Building XYZ	GSFC Building XYZ	CI, WA SL	>	>	>-	>	Collaborative project with ESA, international agreement and license in place, only FNs listed in ACP have access, conduct inperson annual export control outreach
NCI: NASA Critical Infrastructure							
CI: Targeted Technology Reported by Counterintelligence	intelligence						
WA SL: Wassenaar Arrangement Sensitive List	t						
WA VSL: Wassenaar Arrangement Very Sensitive List	ive List						
WA ML: Wassenaar Arrangement Munitions List	ist						

August, 2015

Appendix A: EXPORT CONTROL CHECKLISTS

Checklis	t A: Export Control Request
	Exporter's name
	Exporter's organization/company
	Exporter's phone number
	Type of export (commodity, software, technical data, technology and/or providing a defense service)
	What is the authority (contract or agreement) in place that requires this item to be exported? Provide a copy of authorization.
	Provide a description of the item(s).
	Name of ultimate destination
	Address of ultimate destination
	Method of export (shipping/receiving, hand carry, U.S. mail, fax, electronic, posting on the web or other)
	Provide value and weight (if applicable)
	Date of export
	Is this a temporary export? If so, return date?

CEA/ECS Approval Signature: Click here to enter text.

Checklis	hecklist B: Export Control Request for Deployments		
	Checklist A		
	Dates of deployment		
	Purpose of deployment		
	Destination(s)		
	Mode of transport for various commodities		
	Security measures being taken at each destination		
	Copies of diplomatic clearances		
	Itemized list of all commodities being deployed		
	Shipping documents		
	Commercial invoices		
	Statements from Principal Investigators		

Checkli	st C: Hosting Meetings with Foreign Nationals
Prior to	meeting, the host should:
	For on-site foreign national participants: verify that they are approved through the foreign national access request process.
	For remote foreign national participants without an International Agreement:
	 ☐ Obtain a list of all participants including their names, nationalities, affiliation. ☐ Submit the list to ECS for Visual Compliance check.
	Ensure that the scope of the meeting is within the parameters of the export authorization(s) and communicate it to all participants.
	Ensure that all presentation materials are reviewed per the STI process and properly marked.
	Generate an attendee roster to include, at minimum: name, nationality, and affiliation—all attendees must be accounted for, even if attending only briefly.
At the	start of the meeting:
	Ensure all participants sign the attendee roster or conduct a roll call. Verify that all attendees are authorized to attend.
	An ECS can serve as the export control representative for the meeting.
	Remind the participants of presence of FNs at the meeting and that all participants should remain within the scope of their respective export authorization(s).
During	the meeting:
	Maintain meeting minutes.
	Be attentive to attendees who join after the meeting begins. They should be on the approved attendee roster.
At the	conclusion of the meeting:
	Collect all meeting materials (hard copy and electronic).
	Consolidate and maintain meeting records.

Checklist D: Guidance for Export Control Review for STI Rele	ease	
Is the information in a <u>publicly available</u> document that was appropriately released such as NASA directives, NASA technical engineering, or safety standards?	□Yes	□ No
Is the information high-level program schedules, budget information, or organizational information?	☐ Yes	□ No
Is the information presently in the public domain? ²⁷	☐ Yes	□ No
Is the information considered general scientific, mathematical, or engineering principles commonly taught in schools, colleges, and universities?	☐ Yes	□ No
Is the information considered basic marketing information on function or purpose or general system descriptions?	☐ Yes	□ No
If you answered "Yes" to any of the above questions, the infor- controlled content. If you answered "No" to all questions, p		•
Will the information be released to a limited audience via a NASA International Agreements?	☐ Yes	□ No
Does the information you're reviewing have dissemination restrictions (i.e. For NASA Internal Use Only)?	☐ Yes	□ No
Does the information concern a "defense article" on the USML or on the MTCR Annex? (See Appendix B-4 for defense articles frequently handled by NASA.)	☐ Yes	□ No
If "Yes", does the document contain <u>technical data</u> related to the defense article?	☐ Yes	□ No
Does the information concern an item on the CCL? (See <u>Table 2</u> .)	☐ Yes	□ No
If "Yes" does the document contain <u>technology</u> related to the commodity?		
If you answered "Yes" to any of the above questions, expor in the material and cannot be fully re		nation is present

 $^{^{27}}$ Best practice: ECS may document where that information is published or list the previously approved DAA Number.

Checklist E: Commodity Jurisdiction

This checklist is provided to assist program managers provide the CEA information required to complete the DS-4076. The CEA will use this information to compose a Commodity Jurisdiction (CJ) request to DDTC. The following checklist will be used to help export control determine the commodity jurisdiction (ITAR or EAR) and export control classification (USML category or ECCN) of a specific commodity (see 22 CFR §120.4). An export control official will use this determination to provide guidance needed to export the commodity.

Answer the questions about the commodity and provide historical information and realistic projections/predictions as requested. Provide detailed supporting documentation (e.g. technical data sheets, Launch and Return Orbital Data Sheets (LRODS), schematics, diagrams, that describes and explains the functions, purposes, use and features of the commodity. Include a non-technical description of the commodity, functions, purpose, use etc.

Note: If the commodity is in a developmental or prototype stage, answer the questions for the current status of the commodity. Only one commodity may be entered on a checklist; different development stages of commodities require separate checklists. A new checklist is not required when the major characteristics and descriptive information of the commodity or a family of commodities are essentially the same.

Block 5. Commodity Service Information Select: end-item (i.e. car), component/major (i.e. car frame), component/minor (i.e. car seat), part (i.e. seat buckle), accessory/attachment (i.e. floor mat), software, firmware, services (i.e. performance of oil change), system (components/parts require to perform specific function: i.e. ignition system - to ignite fuel and make car run), information or technical data (i.e. car repair manual) (If none, explain.) Click here to enter text. Product Name: Click here to enter text. Model/Version Number (If none, explain.): Click here to enter text. Part number (If none, explain.): Click here to enter text. Other identifier: Click here to enter text.

	Manufacturer: Click here to enter text.				
	Generic description: Click here to enter text.				
Block 6. Ad	lditional Co	mmodity Information - Patent Information and Documentation			
	Cost per u	nit (Acquisition cost): Click here to enter text.			
□Yes	□ No	Is the commodity the subject of a patent license or provisional patent? If "Yes", describe the status of and Center patent attorney, patent number, if applicable below. Documentation (to be attached) should include: technical information, schematics, drawings, blueprints, training materials, etc. Click here to enter text.			
Block 7. Co	mmodity's	Use			
	componer commodit for public associated	n non-technical terms, what it does, how it operates, and the hts/system in which it is used and all current uses). Specify if the y and any associated information is currently controlled or restricted release by the U.S. Government and/or if the commodity and any I information has been restricted for public release in the past. to enter text.			
Block 8. Sp	ecial and/o	r unique characteristics/capabilities.			
☐ Yes	□ No	Designed to military or intelligence standards or specifications?			
☐ Yes	□ No	Designed for military application?			
☐ Yes	□ No	Special characteristics (i.e. hard points, thermal or infrared signature reduction capability, surveillance or intelligence gathering capability)?			

☐ Yes	□ No	Commercial item modified for military application? If "Yes", how are the two items differentiated? Click here to enter text.				
Identify all n	nilitary application	ns and military capabilities of the product and equivalent				
products use	ed for military app	lication: Click here to enter text.				
		ns, details of special characteristics (i.e. provide level of				
technology s	technology such as Gen II, Gen III): Click here to enter text.					
Explain if the	e commodity to be	e classified is considered specially designed, as defined in the 22				
		Click here to enter text.				
Block 9. Pro	oduct Origin – Ans	wer for all current and previous versions.				
☐ Yes	□ No	Originally designed or developed for a military or intelligence use?				
☐ Yes	□ No	Originally civil and subsequently adapted, configured or modified for a military or intelligence use?				
☐ Yes	□ No	Originally military or intelligence and subsequently adapted, reconfigured or modified for commercial use?				
☐ Yes	□ No	Specifically define the modifications/changes and capabilities removed or added to the commodity. List any differences in form, fit and/or function between the modified and the unmodified versions: Click here to enter text.				

						
Block 10. S	Status o	f Proc	luct Devel	opment		
□ Yes		No	In develo text.	pment? If "Yes", provide explanation: Click here to enter		
□ Yes		No	In use? If "Yes", provide explanation: Click here to enter text.			
Block 11. F	unding	Histo	ry			
□U.S. Gov agency □Foreign g agency □US or for contractor □Self-func	governn reign ded ty funde	nent	current a Include fu supportin	nding source(s) from the list to the left. Include historical, and potential funding sources. Provide explanation. Unding source contract or subcontract number and any documentation. Click here to enter text.		
Block 12. U	J.S. and	or fo	reign avai	lability of <u>identical</u> products		
Select none	e or pro	vide t	he followi	ing information for each foreign source.		
□None						
☐ Manufacturer: Click here to enter text.						
☐ Model #: Click here to enter text.						
∐Explanat	☐ Explanation/description: Click here to enter text.					
☐ Supporting documentation attached or link to website provided Click here to enter text.						

Block 13. Sa	ales Informa	ition	
	e historical, o		l, current and projected sales information. al/prospective customers? (Customer may be
Block 14. C	ommodity's	Export History	
☐ Yes	□ No	□ Unknown	Has this commodity been the subject of a prior Commodity Jurisdiction? If "Yes", cite CJ number: Click here to enter text.
☐ Yes	□ No	☐ Unknown	Has this commodity been exported under a FMS case? If "Yes", cite the Case number: Click here to enter text.
Block 15. E	CILD is respo	onsible for the info	rmation to be provided in this block.
Block 16. The below:	he Center EC	CS will provide the	reason for submitting this CJ request in the space
Click here to	enter text.		
Block 17. P	rovide Sugge	ested USML CATEG	ORY or CCL and explanation in the space below:
Click here to	enter text.		

Block 18. Points of Contact

In the space below, provide points of contact that can clarify what has been provided or that can provide additional information (name, title, organization, phone number, and email). Attach any additional supporting documentation that may deemed useful and list all documents attach them to this request including those that are identified in Block 6.

Click here to enter text.

All signatures on this form expressly indicate a request for a commodity jurisdiction determination. The signatures on the form certify to the accuracy and completeness of the information provided and has not knowingly omitted information that could have an impact on the commodity jurisdiction request. Requests will not be considered without all required signatures.

Requestor: Click here to enter text.

Date: Click here to enter a date.

Branch Head: Click here to enter text.

Date: Click here to enter a date.

Center Export Administrator: Click here to enter text.

Date: Click here to enter a date.

Checkli	st F: Commodity Jurisdiction Guidance for Software
regulato	ng the following information will assist the U.S. Government reviewers in determining the bry jurisdiction of the product. In preparing the documentation, of key importance is to e in detail the purpose, function, and capability of the software source code.
	Identify the Programming Language: Click here to enter text.
	Identify the Operation System(s): Click here to enter text.
	Identify the percentage of High Level Code and Machine Code: Click here to enter text.
	Description of the probable/possible implementation of the product and potential usage in non-technical terms: Click here to enter text.
	Commodity Equipment: Provide a full description of the associated commodity/equipment necessary to execute the software as well as technical characteristics of any special purpose, developmental item or non-off-the-shelf commodity: Click here to enter text.
	Software Structure: Provide a top-level flowchart of the software architecture. Describe the software structure in terms of partitioning or modularity. Are the algorithms contained in one distinguishable portion while data is contained in another? Can the two be separated? Click here to enter text.
	How much firmware is involved? Click here to enter text.
	Associated Software: To what extent does the software rely on other systems' software to exchange data? Does this reliance provide a window into the other programs? Click here to enter text.
	Does the software contain, and/or is it based on, open-source software or software code? Click here to enter text.

Does the proposed software release involve software or related documentation pertaining to any defense systems? Click here to enter text.
Are same or similar software products available from foreign or domestic, commercial or government sources? Click here to enter text.
Identify the specific information contained in the documentation this is proposed for transfer and the specific end-user(s) and end-uses for the documentation: Click here to enter text.
Does the product or any of its components perform information security functions? Click here to enter text.

Checklist G: ITAR License Application

The DDTC License application form – The form should be completed electronically using the DDTC published guidelines for the particular type of license that is required for the transaction (DSP-5 for permanent export, DSP-73 for temporary export, or DSP-61 for temporary import). The published guidelines on the <u>DOS website</u> provide detailed block-by-block information on how to complete the required license application form.

A draft cover letter explaining the reason for the license application to include: the entities/organizations and countries who are participant in the transaction, and the specific reason for the transaction, such as an International Agreement or a contractual requirement.

	Verify that you are using the most current form from the DOS website.			
	Non-Technical description of the hardware, technical data, or software that is to be exported			
	Description of entities/organizations and countries who are participant in the transaction			
	Specific reason for the transaction, such as an IA or a contractual requirement.			
A one-pa	age technical description of each commodity line item to be exported;			
	If the commodity is hardware, a picture or a drawing is required as a .pdf attachments.			
	When multiple items are to be exported, attach supporting technical data sheets and pictures/drawings for each item in the same order that they are listed as line items in the license application, and title these attachments with the same line item name that is used in the license application.			

☐ Copies of any Domestic or International SAAs
$\hfill\Box$ Any other relevant documents or briefings that describe the transaction, the item, program or the intended outcomes.

Checklis	t H: EAR License Application		
	A draft one-page letter of explanation provided as an Microsoft Word document with specific license application information to include:		
	A non-technical brief to describe the export transaction, involved parties, locations, the dollar value and when it must be exported with an explanation of why		
	An impact statement that explains the ramifications if the export transaction does not occur or if it does not occur when planned		
Shipping	g information about the transaction and the parties involved:		
	All expected or likely port(s) of exit		
	Intermediate Consignee(s): the name and address of each organization, and a point of contact with phone number, that will be involved the movement of the items to be exported (both domestic and foreign)		
	Ultimate Consignee name and address		
	End User name and address		
	A complete and detailed description of the end-use intended by the ultimate consignee/and or end-user(s) and identify any countries for which re-export is requested		
Detailed	information about each of the items that will be transferred:		
	ECCN of the item to be exported with documentation of how it was made		
	Composite Theoretical Performance (CTP) – Enter the Adjusted Peak Performance (APP) if the item is a digital computer or equipment containing a computer. If this the item is not and does not contain a computer, enter "N/A" for not applicable.		
	Model Number – Enter the model number of the item to be transferred.		
	Commodity Classification Automated Tracking System (CCATS) Number: If the item previously received a commodity classification determination from BIS, provide the CCATS number shown on the classification issued by BIS. If there has been no known BIS classification enter "N/A".		
	Quantity: Identify the number of items to be exported or reexported.		

	Units: A unit of issue that is commonly used in trade such as "each, dozen, gallons, pounds, etc."
	Unit Price: Provide the acquisition cost or fair market value of the item to be exported rounded to the nearest whole dollar amount. Provide exact unit price only if the value is less than \$0.50. For example, if the unit price is \$0.45, write \$0.45 as the unit price. If the unit price is \$0.65, round up to one dollar.
	Total Price: The unit price times the quantity to be exported.
	Manufacturer: Provide the name only of the manufacturer, if known, otherwise, enter "Unknown."
	Technical Description: Provide a brief, non-technical, one-sentence or phrase that describes this item.
purpose key oper	ch a technical datasheet for each line item that is to be exported to explain the of the item and detailed information, such as physical dimensions, weight, and rating characteristics. The data sheet should generally not exceed one page all dbe provided in Microsoft Word format to allow any minor edits.
order lis	corting technical data sheets and pictures/drawings for each item in the same ted as line items in the license application. Title these attachments with the e item name that is used in the license application so the reviewer can identify I data sheets and pictures/technical data with each line item.
addition ECILD an Request and HEA	CEA collects the required information, provides a draft cover letter, and gathers all documentation to submit to ECILD. The package is reviewed and edited by ad, if necessary, is returned to the CEA to coordinate changes with the or prior to final submission. Once the review is completed and both the CEA have approved the license application package, it is submitted to DOC.

Checklist I: AES Filing Requirement Determination		
If you mark "Yes" to any of the below options, AES filing is required:		
EAR Requirements (15 CFR §758.1 (b))) (1) For all exports of items subject to the EAR that are destined to a country in Country Group E:1 of Supplement No. 1 to Part 740 of the EAR regardless of value;	☐ Yes	□ No
(2) For all exports subject to the EAR that require submission of a license application, regardless of value or destination;	☐ Yes	□ No
(3) For all exports of 9x515 or "600 series" items enumerated or otherwise described in paragraphs .a through .x of a 9x515 or "600 series" ECCN regardless of value or destination, including exports to Canada;	☐ Yes	□ No
(4) For all exports under license exception Strategic Trade Authorization (STA);	☐ Yes	□ No
(5) For all exports of commodities and mass market software subject to the EAR when the value of the commodities or mass market software classified under a single Schedule B Number (or Harmonized Tariff Schedule (HTS)) is over \$2,500, except as exempted by the Foreign Trade Regulations (FTR) in 15 CFR §30 and referenced in paragraph (c) of this section;	☐ Yes	□ No
(6) For all exports of items subject to the EAR that will be transshipped through Canada to a third destination, where the export would require EEI or license if shipped directly to the final destination from the United States (see 15 CFR 30.36(b)(2) of the FTR);	☐ Yes	□ No
(7) For all items exported under authorization Validated End- User (VEU); or	☐ Yes	□ No

(8) For all exports of tangible items subject to the EAR where parties to the transaction, as described in §748.5(d) through (f) of the EAR, are listed on the Unverified List (supplement 6 to part 744 of the EAR), regardless of value or destination.	□ Yes	□ No
(9) For items that fall under ECCNs that list CC Column 1 and 3 and RS Column 2 (see supplement no. 1 to part 738 of the EAR) as reasons for control and such items are for export, regardless of value, to India.	□ Yes	□ No
For shipments under EAR exceptions, excluding EAR license exception By §30.2(a)(iv) (B-G)):	AG and TMP <u>(</u>	<u>FTR</u>
(B) Requiring a DOS, DDTC license under the ITAR	☐ Yes	□ No
(C) Subject to the ITAR, but exempt from license requirements.	☐ Yes	□ No
(D) Requiring a Department of Justice, Drug Enforcement Administration (DEA) export permit (21 CFR 1312).	☐ Yes	□ No
(E) Destined for a country listed in Country Group E:1 as set forth in Supplement 1 to 15 CFR 740.	☐ Yes	□ No
(F) Requiring an export license issued by any other federal Government agency.	☐ Yes	□ No
(G) Classified as rough diamonds under 6-digit HS subheadings 7102.10, 7102.21, and 7102.31	☐ Yes	□ No
If value is greater than \$2500 per Schedule B, licensable or non-licensable (FTR §30.37(a))	☐ Yes	□ No
Shipment to Puerto Rico or to U.S. Virgin Islands (FTR §30.2)	☐ Yes	□ No
See below for examples of situations when AES filing is probably no exhaustive list and Customs reserves the right to require AES filing normally require AES filing:	•	
Miscellaneous Exemptions (See <u>FTR 30.37</u>)	□ Yes	□ No

Special exemptions for shipments to the U.S. Armed	☐ Yes	□ No
Services (See FTR 30.39)		
Special exemptions for certain shipments to U.S.	☐ Yes	□ No
government agencies and employees (See FTR 30.40)		
Below \$2500 per Schedule B, if not subject to an ITAR / EAR export license	☐ Yes	□ No
Export of technical data and defense service under the ITAR DSP-5	☐ Yes	□ No
license, Technical Assistance Agreement or TAA exemption, but must report electronically directly to DDTC in accordance with 22 CFR		
§123.22(b)(3)(iii).		
Shipping to Canada, if not subject to an ITAR / EAR export license or is	☐ Yes	□ No
EAR / ITAR controlled but exempt from licensing, excluding all 500		
and 600 series items in the CCL (FTR §30.36).		
For EAR Shipments exempt from AES Filing see 15 CFR 758.1(c):		
(1) License Exception Baggage (BAG), as set forth in §740.14	☐ Yes	□ No
of the EAR. See 15 CFR 30.37(x) of the FTR;		
(2) License Exception Gift Parcels and Humanitarian	☐ Yes	□ No
Donations (GFT), as set forth in §740.12 of the EAR. See 15 CFR 30.37(h) of the FTR;		
(3) License Exception Aircraft and Vessels (AVS), as set forth	☐ Yes	□ No
in §740.15 of the EAR. See 15 CFR 30.37(o) (5) of the FTR;] .63	
(4) License Exception Governments and International	☐ Yes	□ No
Organizations (GOV), as set forth in §740.11 of the EAR.		
See 15 CFR 30.39 and 30.40 of the FTR;		
(5) License Exception Technology and Software Under Restriction (TSR), as set forth in §740.6 of the EAR. See 15	☐ Yes	□ No
CFR 30.37(f) of the FTR; or		
(6) License Exception Temporary Imports, Exports, and	☐ Yes	□ No
Reexports (TMP) "tools of trade", as set forth in §740.9(a)(1) of the EAR. See 15 CFR 30.37(b) of the FTR.		
31-40.5(a)(1) of the LAN. See 13 of 1 30.37(b) of the LIN.		

Checklist J: AES Requirements

Shipping Ref#:

Definitions:

- **End User**: Ultimate Consignee: Party who will take final possession and use of the materials.
- **Foreign Consignee**: Party who will take possession, but not necessarily user of the materials (e.g. foreign purchaser).
- Intermediate Consignee: Party who will take possession in behalf of the purchase or end user.
- Routed Transaction: A transaction in which the Foreign Principal Party of Interest
 (FPPI) authorizes a U.S. agent to facilitate the export of the terms from the U.S. and
 to prepare and file EEI through AES, in accordance with <u>FTR 30.3(e)</u>. Written
 consent or Power from Attorney (POA) from the FPPI is required.

NOTES:

- AES "FATAL ERROR" must be corrected or suppressed out of AES before export.
- Shipment Reference Numbers are unique and may only be used once. Never use the same Shipment Reference Number (one time use only, even for those AES filings that have already been deleted).
- SCAC / IATA Codes are carrier codes (Airline/Vessel/Ground Transporter). They are not Freight Forwarder codes.
- The "Country of Destination" in the AES must always reflect the country of the "Ultimate Consignee" which is the "End User" on the license.
- The "Intermediate Consignee" on the AES must always reflect the "Intermediate
 Consignee" noted on the license, unless the intermediate consignee on the license is
 N/A and there is a "Foreign Consignee" on the license, then you must declare the
 Foreign Consignee as the intermediate

Checklist J: AES Filing Requirements			
Are you using the correct FTR AES exemption?	☐ Yes	□ No	
Did you annotate your customs invoice, airway bill, or bill of lading with the FTR exemption?	☐ Yes	□ No	
If you answered "Yes" to both questions above, your shipment is exempt from AES filing; sign the bottom of this form and attach it to the shipping form. If you answered "No" to either of the above questions, proceed to fill out the rest of this this checklist.			
1. Is this shipping on a DSP-5 export license? If "Yes", fill out the questions following and proceed to sections 5 and 6. If "No", continue to section 2.	□ Yes	□ No	
Are the parties to the transaction on the license (forwarder/carrier, consignees)?	☐ Yes	□ No	
Has the license been lodged with customs?	☐ Yes	□ No	
Is the remaining value on the license enough to cover export?	☐ Yes	□ No	
Is the license still valid (not expired or exhausted)?	☐ Yes	□ No	
Is the departure date correct?	☐ Yes	□ No	
Is this shipping via Freight Forwarder and is the Forwarder on the license?	⊠ Yes	□ No	
If "Yes", did you identify the forwarder in the AES filing?	☐ Yes	□ No	
Did you select the correct "Export Code" and "License Type"?	☐ Yes	□ No	
Do you have the correct Schedule B?	☐ Yes	□ No	
Is the USML category correct?	☐ Yes	□ No	
If this is Significant Military Equipment (SME)? If so, did you identify this in the AES filing?	☐ Yes	□ No	
Did you update the license defragmentation spreadsheet?	☐ Yes	□ No	
2. Is this shipment a DSP-73? If "Yes", fill out the questions following and proceed to sections 5 and 6. If "No", proceed to section 3.	□ Yes	□ No	

Did you provide the carrier/forwarder with a copy of the		
license to be deposited, decremented and endorsed by USCBP	☐ Yes	□ No
prior to exit and entry?		
Are the parties to the transaction on the license		
(forwarder/carrier, consignees)?	\square Yes	□ No
(ioi warder/carrier, consignees):		
Is the remaining value on the license enough to cover export?	☐ Yes	□ No
Is the license still valid (not expired or exhausted)?	☐ Yes	□ No
Did you select the correct "Export Code" and "License Type"?	☐ Yes	□ No
Is this shipping via Freight Forwarder and is the Forwarder on	☐ Yes	□ No
the license?	□ 1es	
If so, did you identify the Forwarder in the AES filing?	☐ Yes	□ No
Is the departure date correct?	☐ Yes	□ No
Do you have the correct Schedule B?	☐ Yes	□ No
Is the USML category correct?	☐ Yes	□ No
If this is SME? If so, did you identify this in the AES filing?	☐ Yes	□ No
Have you received a copy of the license from the		
carrier/forwarder decremented and endorsed by USCBP (see	☐ Yes	□ No
back of license)?		
Did you update the license defragmentation spreadsheet?	☐ Yes	□ No
3 . Is this shipping under an EAR exception or ITAR Exemption?		
If "Yes", fill out the questions following and proceed to	☐ Yes	□ No
sections 5 and 6. If "No", continue to section 4.		
Are you using the correction Exemption or Exception?	☐ Yes	□ No
Do you have the correct ECCN or USML category?	☐ Yes	□ No
Do you have the correct Schedule B?	☐ Yes	□ No
Did you select the correct "Export Code" and "License Type"?	☐ Yes	□ No
Is the departure date correct?	☐ Yes	□ No

Did you identify the correct Export Port?	☐ Yes	□ No
If using a freight forwarder, did you identify the forwarder in AES?	☐ Yes	□ No
If using a freight forwarder, did you identify the forwarder in AES?	☐ Yes	⊠ No
4 . Is this shipping a "No License Required" and greater than \$2500 per Schedule B?		
If "Yes", fill out the questions following and proceed to sections 5 and 6. If "No", review the previous sections and make sure your item is either a DSP-5, DSP-73, EAR Exception/ITAR Exemption.	□ Yes	□ No
Are you filing your AES per individual Schedule B and ECCN or USML Category?	☐ Yes	□ No
Do you have the correct ECCN?	☐ Yes	□ No
Do you have the correct Schedule B?	☐ Yes	□ No
Is the value correct?	☐ Yes	□ No
Did you identify the correct "Export Code" and "License Type"?	☐ Yes	□ No
Is the departure date correct?	☐ Yes	□ No
Did you identify the correct export port?	☐ Yes	□ No
If using a freight forwarder, did you identify the forwarder in AES?	☐ Yes	□ No
5. Did you file AES within the necessary timelines as required by the method of transportation? For example, for Sea or rail Shipments, the export information must be electronically filed at least 24 hours prior to departure for all ITAR controlled shipments. See Section 3.4.	□ Yes	□ No

6. If all the relevant white boxes have been checked "Yes"		
(grey boxes can be checked "no") for your specific shipment,	☐ Yes	□No
sign and date below. Attach this checklist to the shipping	□ res	□ NO
form.		

Filer Name: Click here to enter text.

Date: Click here to enter a date.

Appendix B: EXPORT CONTROL REFERENCES

B-1: Visa Types and Categories

Visa Type	Visa Category
A-1	Diplomat or foreign government official
A-2	Foreign military personnel stationed in the U.S.
B-1	Business visitor
B-2	Tourism, vacation, pleasure visitor
D	Crewmember
E-1	Treaty trader/treaty investor
E-2	Dependent for E-1
E-3	Australian professional specialty
F-1	Student: academic, vocational
F-2	Dependent for F-1
G-1	Permanent Mission Member of a designated international organization
G-2	Temporary Mission Member of a designated international organization
G-3	Representatives of non-recognized or non-member governments
G-4	Individuals coming to the U.S. to take up an appointment at a designated international organization
G-5	Personal employees or domestic workers of a G-1 – 4 visa holders
H-1B	Specialty occupations in fields requiring highly specialized knowledge
H-2A	Temporary agricultural worker
H-2B	Temporary worker performing other services or labor of a temporary or seasonal nature.
I	Media, journalist

Visa Type	Visa Category
J-1	Exchange visitor
J-1 NASA	Exchange visitor-NASA SPONSORED
J-2	Dependent for J-1
K-1	Foreign-citizen fiancé(e) of a U.S. citizen
K-2	Child of K-1
K-3	Foreign-Citizen Spouse of a U.S. citizen
K-4	Child of K-3
L-1	Intra-company transferee
L-2	Dependent for L-1
NATO	NATO
O-1A	Foreign national with extraordinary ability in Sciences, Education, Business or Athletics
O-1B	Foreign national with extraordinary ability in Arts and Motion Picture/Television Industry
0-2	Individuals who will accompany an O-1, professionally
0-3	Dependent for O-1A/B
Q-1	International cultural exchange visitor
R-1	Religious worker
R-2	Dependent for R-1
TN	NAFTA professional worker: Mexico, Canada
TD	Dependent for TN
VWP	Visa Waiver Program

B-2: Provisos and IdMAX

ID	Description	Status
1	**Approved access is limited to information in the public domain; no access to classified, sensitive but unclassified, or export-controlled information or hardware is authorized.	Active
2	**Use of an escort is required.	Inactive
3	**The visit is authorized only so long as there is a valid visa in effect.	Inactive
4	**No access to U.S. Government or NASA technical data, IT systems/networks, email, equipment, software (including source code), programs and systems authorized.	Active
5	**Approval of visit is not a precedent for approval of long term appointment.	Active
6	**Copies of the visit approval provisos/conditions are to be provided by the NASA host to all NASA employees and on-site contractor employees working with this foreign person.	Active
7	**Host is to confer with CEA to determine export classification of data and hardware to be accessed prior to visit.	Active
8	**The visitor is authorized to use NASA standard PC with COTS software and access to NASA technological data regarding [] provided, these items and corresponding use of technology are eligible for license-free to (country/unless proscribed).	Active
9	**The employer, [], is responsible for compliance with U.S. export control laws and regulations and for seeking an appropriate license if required. NASA host shall be apprised of these provisos and is responsible for informing the employer of this proviso.	Active
10	**A non-disclosure agreement is required for this assignment. An ACP must be in place and approved prior to this visit. (NPR 2190.1B, Appendix D).	Active
11	**Access to the NASA super computer(s) is only approved in the partitioned area. No permission will be granted for direct access to the super computer nodes bypassing the front end.	Active
12	**Release of NASA software source code is not authorized.	Active
13	**The visitor is authorized access to NASA technological data regarding [] provided, these items and corresponding use of technology are eligible for license-free to (country).	Active

ID	Description	Status
14	**Approved access is limited to information that would be approved for the public domain and to specific non-public domain NASA data required under Space Act Agreement. Controls to restrict the individuals access only to export-controlled information that is allowed under the [ISS] agreement that is not controlled for Missile technology reasons.	Active
15	[] is responsible for acquiring export license authority if required.	Active
16	Visit is in support of [] activity and should be coordinated with [].	Active
17	Host should confirm [] approval.	Active
18	Copies of the visit approval provisos/conditions are to be provided by the JPL host to all JPL employees and on-site contractor employees working with this foreign person.	Active
19	No access to U.S. Government or NASA technical data, IT systems/networks, email, equipment, software (including source code), programs and systems authorized, except as authorized by approved Technical Assistance Agreements.	Active
20	**Access to the CERN/HOSC computer is remote access only and only approved in the partitioned area, and only valid for 2 years at a time.	Active
21	***Any Remote IT Access is only permitted from an IP Address within the U.S. Access from an IP Address within China is prohibited	Active
22	***Visit is only approved for 2 years-(through)	Active
23	**Approved access for one year and require annual updates-through ().	Active
24	Remote access only. No physical access to NASA facilities	Active
25	**Caltech/JPL is authorized to transfer only that NASA-controlled technical data regarding () necessary to fulfill its obligation under TA (). Transfer of other NASA non-public domain technical data in support of this TAA requires prior NASA approval.	Active
26	Escort requirements are to be consistent with the Interim Policy Regarding Foreign National Access Management dated April 2, 2014 and NPR 1600.4 "National Security Program"	Active

B-3: STI Release Rationale

Instructions: This checklist should be attached to the NASA Form 1676 (NASA Scientific and Technical Document Availability Authorization (DAA)) in support of requests for disclosures of STI, and information controlled under Export Regulations (International Traffic in Arms Regulations (ITAR) and Export Administration Regulations (EAR). Please review and sign next to the applicable rationale item[s] on the next page. Additional written information is required for Item V.

Background: Release of NASA information into a public forum may provide NASA technology to countries with interests adverse to the U.S. This form will help you efficiently process your proposed disclosure of NASA STI and assure that the request complies with export control regulations. Your Center ECS will use this rationale in conjunction with the completed NF 1676 which is required for each domestic and international presentation and publication of STI (See NPD 2200.1C).

Generally, the export of information pertaining to the design, development, production, manufacture, assembly, operation, repair, testing, maintenance or modification of defense articles (i.e. space flight hardware, ground tracking systems, launch vehicles, radiation hardened hardware and associated hardware and engineering units for these items are controlled by the ITAR. The export of information not controlled by the ITAR are generally controlled by the BIS under the EAR. If the information that you propose for release is controlled for export compliance reasons, but also falls into one or more of the following "Rationale for Public Release" items, the information may be determined to be suitable for public release.

STI Release Rationale

Title of Presentation: Click here to enter text. Author: Click here to enter text.

Rationale for Public Release I

The information is already in the public domain in its entirety through a non-NASA medium and/or through NASA release previously approved by an authorized NASA official.

Name of Publication: Click here to enter text. Date of Publication: Click here to enter text.

Original DAA Approval #: Click here to enter text. Date of Approval: Click here to enter text.

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Rationale for Public Release II

The information pertains exclusively to the release of general scientific, mathematical, or engineering principles commonly taught in schools, colleges and universities, e.g. data pertaining to studies of biomedical or planetary sciences without disclosure of information pertaining to articles controlled by the ITAR or EAR such as flight instruments, high speed computers, or launch vehicles.

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Rationale for Public Release III

The information falls into the areas of concern as referenced above, but is offered at a general purpose of high level, e.g. poster briefs and overviews, where no specific information pertaining to ITAR or EAR controlled items is offered.

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Rationale for Public Release IV

The information pertains exclusively to the release of software and assurance methodologies or studies, without disclosing information pertaining to articles controlled by the ITAR or EAR.

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Rationale for Public Release V

There is a compelling written reason for the public release of the information that is not covered by the "rationale" items I-IV above. The information to be released cannot be used to exploit or defeat controlled U.S. technologies. It is therefore requested that the CEA review the attached supporting statement and approve the release of the information pursuant to the exemption CFR22 - 125.4(b)(13). To use this rationale, the Requestor must provide/include a written statement that provides the export classification of the technical data and explains why the release of the information is a reasonable and advisable action.

Typed Name: Click here to enter text. Signature: Click here to enter text.

Mail code: Click here to enter text. Date: Click here to enter text.

Export Classification: Click here to enter text.

Rationale Supporting decontrol and release: Click here to enter text.

Additional Information: Click here to enter text.

B-4: Defense Articles Frequently Handled by NASA

USML Defense Articles Commonly Handled by NASA

Category IV—LAUNCH VEHICLES, GUIDED MISSILES, BALLISTIC MISSILES, ROCKETS, TORPEDOES, BOMBS AND MINES

- Rockets (including but not limited to meteorological and other sounding rockets);
- Launch vehicles;
- Apparatus, devices, and materials for the handling, control, activation, monitoring, detection, protection, discharge, or detonation of rockets and launch vehicles;
- Missile and space launch vehicle power plants; and
- Ablative materials fabricated or semi-fabricated from advanced composites (e.g., silica, graphite, carbon, carbon/carbon, and boron filaments).

CATEGORY V—EXPLOSIVES AND ENERGETIC MATERIALS, PROPELLANTS, INCENDIARY AGENTS AND THEIR CONSTITUENTS

• Used primarily on rockets, launch vehicles, and spacecraft.

CATEGORY VIII—AIRCRAFT AND RELATED ARTICLES

• Joint programs with DOD or NASA use of "military" aircraft (such as UAVs) and associated equipment (such as military aircraft engines) that were specifically designed, modified, or equipment for military purposes.

CATEGORY XII – FIRE CONTROL, RANGE FINDER, OPTICAL AND GUIDANCE AND CONTROL EQUIPMENT

• Missile tracking and guidance systems.

CATEGORY XV—SPACECRAFT AND RELATED ARTICLES

Spacecraft with certain electro-optical remote sensing capabilities, spacecraft
that provides space-based logistics or servicing of any other spacecraft,
spacecraft with an integrated propulsion system other than that required
attitude control;

- Ground control stations for telemetry, tracking and control of spacecraft or satellites in this category, or employing any of the cryptographic items controlled under category XIII of this subchapter; and
- Global Positioning System (GPS) receiving equipment specifically designed, modified or configured for military use; or GPS receiving equipment with characteristics defined in USML.

MTCR Defense Articles Commonly Handled by NASA

CATEGORY I - ITEM 1

Complete Delivery Systems

CATEGORY I - ITEM 2

• Complete Subsystems Usable For Complete Delivery Systems

CATEGORY II - ITEM 3

Propulsion Components And Equipment

CATEGORY II - ITEM 4

• Propellants and Constituent Chemicals for Propellants

CATEGORY II - ITEM 10

• Flight Control Systems

CATEGORY II - ITEM 12

• Launch Support Equipment, Facilities, and Software for Systems in Item 1

CATEGORY II - ITEM 16

Modelling-Simulation And Design Integration

CATEGORY II - ITEM 18

• Nuclear Effects Protection

B-5: Frequently Used Exemption/Exception List

Title 14 – Aeronautics and Space, Ch.5, Part 1217			
1217.100 to 1217.106 – Duty Free Entries of Space Articles			
Title 15 – Commerce and Foreign Trade, Subtitle B, Ch.7, Subchapter C, Part 740			
740.3 – Shipments of limited value (LVS)			
740.4 – Shipments to Country Group B countries (BGS); See Supplement 1 to 740 – Country Groups			
740.5 – Civil end-users only (CIV)			
740.6 – Technology and software under restriction (TSR)			
740.7. – Computers (APP)			
740.9 – Temporary imports, exports, re-exports, and transfers (in-country) (TMP)			
740.10 – Servicing, and replacement of parts and equipment (RPL)			
740.11 - Governments, international organizations, international inspections under the Chemical Weapons Convention, and the International Space Station (GOV)			
740.12 – Gift parcels and humanitarian donations (GFT)			
740.13 – Technology and software—unrestricted (TSU)			
740.14 – Baggage (BAG)			
740.15 – Aircraft, vessels and spacecraft (AVS)			
740.16 – Additional permissive re-exports (APR)			
740.17 – Encryption commodities, software and technology (ENC)			
740.19 – Consumer Communications Devices (CCD)			
740.20 – License Exception Strategic Trade Authorization (STA)			
Title 15 – Commerce and Foreign Trade, Subtitle B, Ch.1, Subpart A, Part 30			
30.36 – Shipments destined to Canada			
30.37(a) – Commodities less than \$2500			
30.37(b) – Tools of Trade			
30.37(f) – Exports of Technology or Software			

Title 22 – Foreign Relations, ITAR, Department of States, Ch.1, Subchapter M		
123.4(a) (1) – Temporary import of US Items for servicing, repair, inspection, testing, calibration, overhaul, reconditioning, or one-to-to-one replacement		
123.16(b) (2) – Components or spare parts less than \$500		
123.16(b) (3) – Specially designed packing cases		
125.4 (b)(3)(7)(11) – General Applicability		
125.4(b)(13) – Technical Data approved for public release		
126.4(a) – Temporary imports or exports by or for the U.S. Gov. Agency		
125.5(c) – Exemptions from plant visits		
126.4(c) – temporary imports or exports or permanent export by U.S. Gov. Agency for U.S. Gov. Agency Abroad		
126.5(a) —Temporary import from Canada and export back to Canada for repair, marketing, trade shows		
126.5(b) – Permanent or temporary export to Canada for entities lawfully registered with Canada		
126.16 - Exemption pursuant to the Defense Trade Cooperation Treaty between the		
<u>United States and Australia</u>		
<u>126.17 - Exemption pursuant to the Defense Trade Cooperation Treaty between the United States and the United Kingdom.</u>		
126.18 - Exemptions regarding intra-company, intra-organization, and intra-governmental transfers to employees who are dual nationals or third-country nationals		
Title 27 – Alcohol, Tobacco Products, and Firearms, Part 447, Subpart 447, Subpart F		
447.53(a)(1) – Importation of a U.S. Gov. Agency		
447.53(a)(2) – Importation for the Dept. of Defense		

Appendix C: KEY DEFINITIONS

The ITAR and EAR have specific definitions for export control-related terms. It is important to be familiar with both sets of definitions as well as other export-related terms to ensure proper compliance. The definitions listed were pulled directly from the electronic Code of Federal Regulations (CFR), and for revisions made to these terms please refer to the respective website.

ITAR Definitions:

Automated Export System (AES) - The Automated Export System (AES) is the Department of Commerce, Bureau of Census, electronic filing of export information. The AES shall serve as the primary system for collection of export data for the Department of State. In accordance with this subchapter U.S. exporters are required to report export information using AES for all hardware exports. Exports of technical data and defense services shall be reported directly to the Directorate of Defense Trade Controls (DDTC). Also, requests for special reporting may be made by DDTC on a case-by-case basis, (e.g., compliance, enforcement, congressional mandates). See 22 CFR §120.30.

Commodity jurisdiction - procedure is used with the U.S. Government if doubt exists as to whether an article or service is covered by the U.S. Munitions List. It may also be used for consideration of a re-designation of an article or service currently covered by the U.S. Munitions List. See 22 CFR §120.4 for full definition.

Defense Article- any item on the USML including "technical data". See 22 CFR §120.6.

Defense Service-furnishing of assistance (including training) to foreign persons, whether in the U.S. or abroad in the design, development, engineering, manufacture, production, assembly, testing, repair, maintenance, modification, operation, demilitarization, destruction, processing or use of defense articles; furnishing to foreign persons of any technical data; or military training of foreign units and forces, regular and irregular, including formal or informal instruction of foreign persons in the U.S. or abroad or by correspondence courses, technical, educational, or information publications and media of all kinds. See <u>22 CFR §120.9</u>.

End-item - a system, equipment, or an assembled article ready for its intended use. Only ammunition or fuel or other energy source is required to place it in an operating state. See <u>22 CFR §120.45(a)</u>.

Exemption- an ITAR authorization from Defense Trade Control for exports of unclassified defense articles and defense services without a license under certain specific provisions or limitations. Exemptions can be found in the ITAR. All conditions of an Exemption must be met before use is authorized. Use of Exemptions for exports must have the concurrence of the CEA or the HEA and there are recordkeeping and reporting requirement to HEA. See 22 CFR §123, §125, and §126 for a description of the most relevant ITAR License Exemptions

Export- (1) Sending or taking a defense article out of the U.S. in any manner, except by mere travel outside of the U.S. by a person whose personal knowledge includes technical data; or (2) Transferring registration, control or ownership to a foreign person of any aircraft, vessel, or satellite covered by the USML, whether in the U.S. or abroad; or (3) Disclosing (including oral or visual disclosure) or transferring in the U.S. any defense article to an embassy, any agency or subdivision of a foreign government (e.g., diplomatic missions); or (4) Disclosing (including oral or visual disclosure) or transferring technical data to a foreign person, whether in the U.S. or abroad; or (5) Performing a defense service on behalf of, or for the benefit of, a foreign person, whether in the U.S. or abroad. (6) A launch vehicle or payload shall not, by reason of the launching of such vehicle, be considered an export for purposes of this subchapter. See 22 CFR §120.17.

Foreign person means opposite of U.S. person or any natural person who is not a lawful permanent resident as defined by 8 U.S.C. 1101(a)(20) or who is not a protected individual as defined by 8 U.S.C. 1324b(a)(3). It also means any foreign corporation, business association, partnership, trust, society or any other entity or group that is not incorporated or organized to do business in the U.S., as well as international organizations, foreign governments and any agency or subdivision of foreign governments (e.g., diplomatic missions). See 22 CFR §120.16.

Fundamental research- basic and applied research in science and engineering where the resulting information is ordinarily published and shared broadly within the scientific community, as distinguished from research the results of which are restricted proprietary reasons or specific U.S. Government access and dissemination controls. University research will not be considered fundamental research if: (1) the university or its researchers accept other restrictions on publication of scientific and technical information resulting from the project or activity or (2) the research is funded by the U.S. Government and specific access and dissemination controls protecting information resulting from the research are applicable. See 22 CFR §120.11(a)(8).

License- License means a document bearing the word "license" issued by the Deputy Assistant Secretary of State for Defense Trade Controls, or his authorized designee, that permits the export, temporary import, or brokering of a specific defense article or defense service controlled by this subchapter. See <u>22 CFR §120.20</u>.

Public domain-information which is published and which is generally accessible or available to the public; through sales at newsstands and bookstores, through subscriptions which are available without restriction to any individual who desire to obtain or purchase the published information; through second class mailing privileges granted by the U.S. Government, at libraries open to the public of from which the public can obtain documents; through patents available at any patent office; – through unlimited distribution at a conference, meeting, seminar, trade show or exhibition, generally accessible to the public, in the U.S.; through public release (i.e., unlimited distribution) in any form (e.g., not necessarily in published form) after approval by the cognizant U.S. Government department or agency; through fundamental research in science and engineering at accredited institutions of higher learning in the U.S., where the resulting information is ordinarily published and shared broadly in the scientific community. Fundamental research is defined to mean basic and applied research in science and engineering where the resulting information is ordinarily published and shared broadly within the scientific community, as distinguished from research the results of which are restricted for proprietary reasons or specific U.S. Government access and dissemination controls. (NASA Export Administrator of CEA concurrence is required to designate research as fundamental.) University research will not be considered "fundamental research" if: the University or its researchers accept other restrictions on publication of scientific and technical information resulting from the project or activity; or the research is funded by the U.S. Government and specific access and dissemination controls protecting information resulting from the research are applicable. See 22 CFR §120.11.

Software - includes but is not limited to the system functional design, logic flow, algorithms, application programs, operating systems, and support software for design, implementation, test, operation, diagnosis and repair. A person who intends to export only software should, unless it is specifically enumerated in §121.1 of this subchapter (e.g., USML Category XIII(b)), apply for a technical data license pursuant to part 125 of this subchapter. See 22 CFR §120.45(f).

Specially designed- Except for commodities or software described in paragraph (b) of this section, a commodity or software (see §121.8(f) of this subchapter) is specially designed if it: (1) As a result of development, has properties peculiarly responsible for achieving or exceeding the controlled performance levels, characteristics, or functions described in the relevant U.S. Munitions List paragraph; or (2) Is a part (see §121.8(d) of this subchapter), component (see §121.8(b) of this subchapter), accessory (see§121.8(c) of this subchapter), attachment (see §121.8(c) of this subchapter), or software for use in or with a defense article. (b) For purposes of this subchapter, a part, component, accessory, attachment, or software is not specially designed if it: (1) Is subject to the EAR pursuant to a commodity jurisdiction determination; (2) Is, regardless of form or fit, a fastener (e.g., screws, bolts, nuts, nut plates, studs, inserts, clips, rivets, pins), washer, spacer, insulator, grommet, bushing, spring, wire, or solder; (3) Has the same function, performance capabilities, and the same or "equivalent" form and fit as a commodity or software used in or with a commodity that: (I) Is or was in production (i.e., not in development); and (ii) Is not enumerated on the U.S. Munitions List; (4) Was or is being developed with knowledge that it is or would be for use in or with both defense articles enumerated on the U.S. Munitions List and also commodities not on the U.S. Munitions List; or (5) Was or is being developed as a general purpose commodity or software, i.e., with no knowledge for use in or with a particular commodity (e.g., a F/A-18 or HMMWV) or type of commodity (e.g., an aircraft or machine tool). See 22 CFR §120.41.

Technical Data-information which is required for the design, development, production, manufacture, assembly, operation, repair, testing, maintenance, or modification of "defense articles", classified information related to "defense articles" information covered by an invention secrecy order, software directly related to "defense articles". Does not include information concerning general scientific, mathematical or engineering principles commonly taught in schools, colleges, and universities or information in the "public domain". It also does not include basic marketing information on function or purpose or general system descriptions of "defense articles" See 22 CFR §120.10.

Temporary export- generally less than four (4) years with no transfer of title. See <u>22 CFR</u> §120.18.

U.S. Person- a natural person who is a lawful permanent resident as defined in 8 U.S.C §1101(a) (20) or who is a protected individual as defined by 8 U.S.C. § 1324b (a) (3). It also means any corporation, business, association, partnership, society, trust, or any other entity, organization or group that is incorporated to do business in the U.S. It also includes any governmental (Federal, state or local), entity. See CFR §120.15.

EAR Definitions:

Adjusted Peak Performance (APP) - An adjusted peak rate at which "digital computers" perform 64-bit or larger floating point additions and multiplications. The formula to calculate APP is contained in a technical note at the end of Category 4 of the Commerce Control List. See 15 CFR §772.

Automated Export System (AES) - AES is a nationwide system operational at all ports and for all methods of transportation through which export shipment data required by multiple agencies is filed electronically to U.S. Customs and Border Protection, using the efficiencies of Electronic Data Interchange (EDI). AES allows the export information to be collected electronically and edited immediately. See <u>15 CFR §772</u>.

Bill of Lading - The contract of carriage and receipt for items, issued by the carrier. It includes an air waybill, but does not include an inland bill of lading or a domestic air waybill covering movement to port only. See <u>15 CFR §772</u>.

Commodity is any article, material, or supply except technology and software. See <u>15 CFR</u> §772.

Composite Theoretical Performance - This is metric that was used to gauge the computing-performance capacity of a high performance computer (HPC). We cite this outdated term in the manual because is still referenced in the EAR for completing a license application in <u>15 CFR Supplement No.1 §748</u>, Block 22(b).

Country Chart - A chart, found in Supplement No. 1 to part 738 of the EAR, that contains certain licensing requirements based on destination and reason for control. In combination with the CCL, the Country Chart indicates when a license is required for any item on the CCL to any country in the world under General Prohibition One (Exports and Reexports in the Form Received), General Prohibition Two (Parts and Components Reexports), and General Prohibition Three (Foreign Produced Direct Product Reexports). See part 736 of the EAR. See 15 CFR §772.

Dual-use are items that have both commercial and military or proliferation applications. While this term is used informally to describe items that are subject to the EAR, purely commercial items and certain munitions items listed on the Wassenaar Arrangement Munitions List or the Missile Technology Control Regime Annex are also subject to the EAR (see § 734.2(a) of the EAR). See 15 CFR §772.

End item - a system, equipment or assembled commodity ready for its intended use. Only ammunition, or fuel or other energy source is required to place it in an operating state. Examples of end items include ships, aircraft, computers, firearms, and milling machines. See 15 CFR §772.

End-user- The person abroad that receives and ultimately uses the exported or reported items. The end-user is not a forwarding agent or intermediary, but may be the purchaser or ultimate consignee. See <u>15 CFR §772</u>.

Exception is an EAR authorization that allows an export or reexport of an otherwise controlled item to proceed without a license, provided that certain specified conditions are met. Exception is a Bureau of Industry and Security (BIS) term and applies only to items under the jurisdiction of the EAR. Use of Exceptions for exports must have the concurrence of the Center Export Administrator (CEA) or the Headquarters Export Administrator (HEA). See 15 CFR §740 for a description of all EAR License Exceptions.

Export - an actual shipment or transmission of items subject to the EAR out of the United States, or release of technology or software subject to the EAR to a foreign national in the United States, as described in paragraph (b)(2)(ii) of this section.(See 15 CFR §734.2(b).

Export Control Classification Number (ECCN) – a five character (Digit)-identifies CCL category; - a five character, Alpha-numeric symbol; e.g., 9A004– First Character (Digit)- identifies CCL category; e.g., 9 is Propulsion Systems, Space Vehicles and Related Equipment. Second Character (Letter) - identifies which of five "groups" the item. See <u>BIS's explanation for ECCN's</u>.

Fundamental research is basic and applied research in science and engineering, where the resulting information is ordinarily published and shared broadly within the scientific community.

- 1. Research conducted by scientists, engineers, or students at a university normally will be considered fundamental research. (University means any accredited institution of higher education in the U.S.)
- University based research is not considered "fundamental" research if the university or
 its researchers accept (at the request, for example, of an industrial sponsor) other
 restrictions on publication of scientific and technical information resulting from the
 project or activity.

- Research conducted by42 scientists or engineers working for a business entity will be considered "fundamental research" as long as researchers are free to make the scientific and technical information resulting from the research publicly available without restriction or delay based on proprietary concerns
- 4. See 15 CFR §734.8 for the full description of fundamental research under the EAR.

Intermediate consignee - the person that acts as an agent for a principal party in interest for the purpose of effecting delivery of items to the ultimate consignee. The intermediate consignee may be a bank, forwarding agent, or other person who acts as an agent for a principal party in interest. See 15 CFR §772.

License - authority issued by the Bureau of Industry and Security authorizing an export, reexport, or other regulated activity. The term "license" does not include authority represented by a "License Exception." <u>See 15 CFR §772</u>.

License Exception - an authorization described in part 740 of the EAR that allows you to export or reexport, under stated conditions, items subject to the EAR that otherwise would require a license. Unless otherwise indicated, these License Exceptions are not applicable to exports under the licensing jurisdiction of agencies other than the Department of Commerce. <u>See 15</u> CFR §772.

Missile Technology Control Regime (MTCR) - the United States and other nations in this multilateral control regime have agreed to guidelines for restricting the export and reexport of dual-use items that may contribute to the development of missiles. The MTCR Annex lists missile-related equipment and technology controlled either by the Department of Commerce's Bureau of Industry and Security—Export Administration Regulations (15 CFR Parts 730 through 799) or by the Department of State's Directorate of Defense Trade Controls—International Traffic in Arms Regulations (22 CFR Parts 120 through 130).

Missile Technology Export Control Group (MTEC) - chaired by the Department of State, the MTEC primarily reviews applications involving items controlled for Missile Technology (MT) reasons. The MTEC also reviews applications involving items not controlled for MT reasons, but destined for a country and/or end-use/end-user of concern.

No License Required (NLR) - "No License Required (NLR)" is an authorization for shipment of an item that may change, depending on the transaction. NLR may be used for either EAR99 items, or items on the CCL that do not require a license for the destination in question, provided no General Prohibitions apply; NLR ("no license required") is also the symbol entered on the

Electronic Export Information filing for the Automated Export System certifying that there is an authorization of "No License Required" for the export.

Publicly Available Information-information that is generally accessible to the interested public in any form and, therefore, not subject to the EAR. <u>See 15 CFR §772</u>.

Publicly Available Technology and Software- technology and software that are published or will be published; arise during, or result from, fundamental research; are educational; or are included in certain patent applications. See 15 CFR §734 and 15 CFR §772.

Re-export-shipment from one foreign country to another foreign country. For purposes of the EAR, the export or reexport of items subject to the EAR that will transit through a country or countries, or be transshipped in a country or countries to a new country, or are intended for reexport to the new country, are deemed to be exports to the new country. See 15 CFR §774.

Specially-designed- When applying this definition, follow this sequential analysis set forth below. (For additional guidance on the order of review of "specially designed," including how the review of the term relates to the larger CCL, see Supplement No. 4 to Part 774 of the EAR—Commerce Control List Order of Review.) See <u>15 CFR §772</u>.

- (a) Except for items described in (b), an "item" is "specially designed" if it:
 - (1) As a result of "development" has properties peculiarly responsible for achieving or exceeding the performance levels, characteristics, or functions in the relevant ECCN or U.S. Munitions List (USML) paragraph; or
 - (2) Is a "part," "component," "accessory," "attachment," or "software" for use in or with a commodity or defense article 'enumerated' or otherwise described on the CCL or the USML.
- (b) A "part," "component," "accessory," "attachment," or "software" that would be controlled by paragraph (a) is not "specially designed" if it:
 - (1) Has been identified to be in an ECCN paragraph that does not contain "specially designed" as a control parameter or as an EAR99 item in a commodity jurisdiction (CJ) determination or interagency-cleared commodity classification (CCATS) pursuant to §748.3(e);

- (2) Is, regardless of 'form' or 'fit,' a fastener (e.g., screw, bolt, nut, nut plate, stud, insert, clip, rivet, pin), washer, spacer, insulator, grommet, bushing, spring, wire, solder;
- (3) Has the same function, performance capabilities, and the same or 'equivalent' form and fit, as a commodity or software used in or with an item that:
 - (i) Is or was in "production" (i.e., not in "development"); and
 - (ii) Is either not 'enumerated' on the CCL or USML, or is described in an ECCN controlled only for Anti-Terrorism reasons;
- (4) Was or is being developed with "knowledge" that it would be for use in or with commodities or software (i) described in an ECCN and (ii) also commodities or software either not 'enumerated' on the CCL or the USML (e.g., EAR99 commodities or software) or commodities or software described in an ECCN controlled only for Anti-Terrorism (AT) reasons;
- (5) Was or is being developed as a general purpose commodity or software, i.e., with no "knowledge" for use in or with a particular commodity (e.g., an F/A-18 or HMMWV) or type of commodity (e.g., an aircraft or machine tool); or
- (6) Was or is being developed with "knowledge" that it would be for use in or with commodities or software described (i) in an ECCN controlled for AT-only reasons and also EAR99 commodities or software; or (ii) exclusively for use in or with EAR99 commodities or software.

Technical Data- may take forms such as blueprints, plans, diagrams, models, formulae, tables, engineering designs and specifications, manuals and instructions written or recorded on other media or devices such as disk, tape, or read-only memories. See 15 CFR §772.

Technology - Specific information necessary for the "development", "production", or "use" of a product. The information takes the form of "technical data" or "technical assistance". Controlled "technology" is defined in the General Technology Note and in the Commerce Control List (Supplement No. 1 to part 774 of the EAR). "Technology" also is specific information necessary for any of the following: operation, installation (including on-site installation), maintenance (checking), repair, overhaul, refurbishing, or other terms specified in ECCNs on the CCL that control "technology." N.B.: Technical assistance--May take forms such as instruction, skills training, working knowledge, consulting services. NOTE 1: "Technical

assistance" may involve transfer of "technical data". NOTE 2: "Technology" not elsewhere specified on the CCL is designated as EAR99, unless the "technology" is subject to the exclusive jurisdiction of another U.S. Government agency (see § 734.3(b)(1)) or is otherwise not subject to the EAR (see § 734.4(b)(2) and (b)(3) and §§ 734.7 through 734.11 of the EAR). "Technical data". May take forms such as blueprints, plans, diagrams, models, formulae, tables, engineering designs and specifications, manuals and instructions written or recorded on other media or devices such as disk, tape, read-only memories. (15 CFR 772)

Transfer - a shipment, transmission, or release to any person of items subject to the EAR either within the United States or outside the United States. In-country transfer/transfer (in-country). The shipment, transmission, or release of items subject to the EAR from one person to another person that occurs outside the United States within a single foreign country.

Ultimate consignee - The principal party in interest located abroad who receives the exported or re-exported items. The ultimate consignee is not a forwarding agent or other intermediary, but may be the end-user. See <u>15 CFR §772</u>.

Other Key definitions:

NASA Empowered Official - an individual who is recognized by DDTC as having authority, among other things, to sign license requests or other requests for approval on behalf of the Agency, based on the NASA Administrator's delegation of authority through his Associate Administrator for International and Interagency Relations to the Export Control and Interagency Liaison Division (ECILD division director, HEA, and HQ EC specialist).

Export authorization- an export authorization includes: a license, a license exemption, a license exception, or No License Required (NLR).

